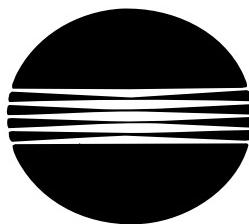


FAX of Di251f/Di351f

SERVICE MANUAL



MINOLTA

INDEX

**GENERAL,
MECHANICAL/ELECTRICAL**

**DIS/REASSEMBLY,
ADJUSTMENT**

**SOFT SWITCHES,
SERVICE MODE**

TROUBLESHOOTING

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GENERAL, MECHANICAL/ELECTRICAL

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GENERAL, MECHANICAL/ELECTRICAL

1. SPECIFICATIONS

1-1. List of Specifications

	Specifications
Memory Capacity	32 MB
Communication mode	ECM / G3
Scanning resolution (main line x feed line)	8 x 3.85 line/mm, 8 x 7.7 line/mm, 8 x 15.4 line/mm, 16 x 15.4 line/mm
Data speed	G3 / ECM: 33.6 Kbps - 2.4 Kbps
Transmission time	G3 / ECM: Image signal - Pass the 2 sec (V.34 JBIG)
Coding method	MH / MR / MMR / JBIG
Applicable network	G3 / ECM: Phone line
Options	Optional memory board TX marker *

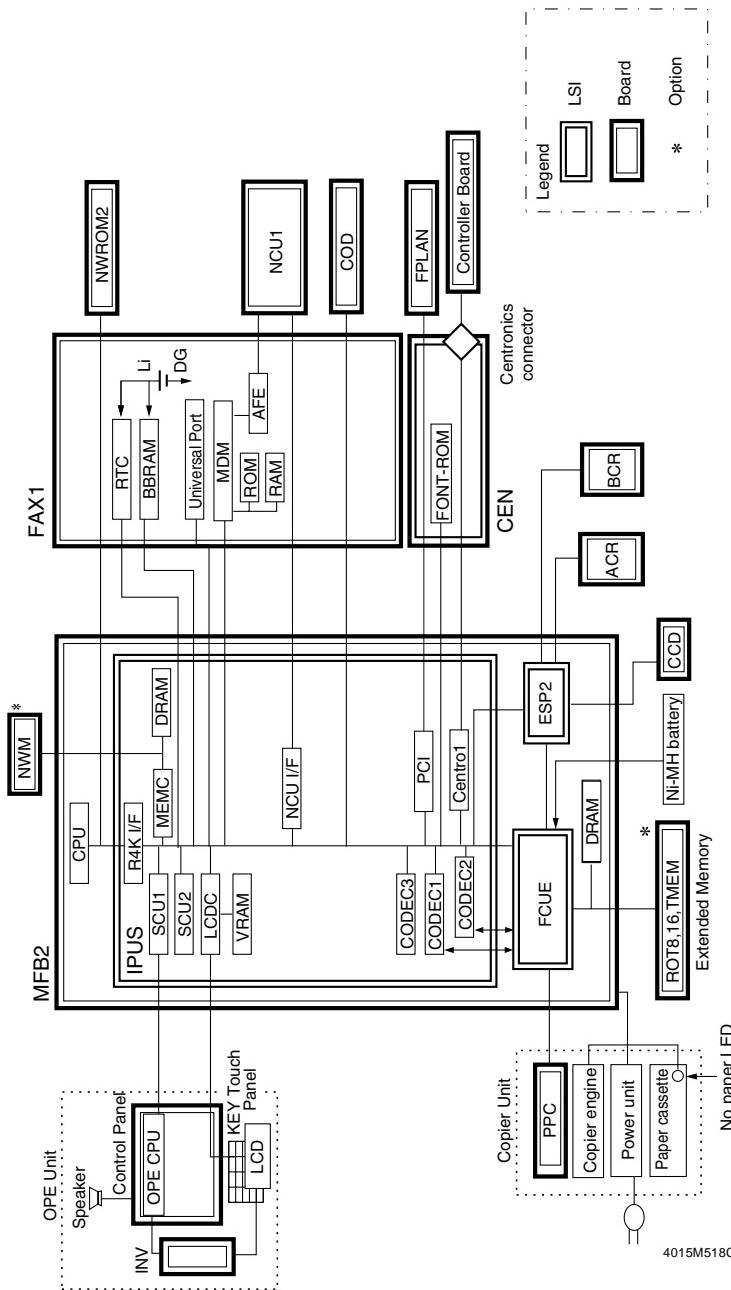
*: TX marker is unavailable for 2 sided document feeder (ADFR).

1-2. List of Functions

	Function	(●: available X: unavailable)
Speed	High speed scanning	● (0.55 sec./Letter Crosswise fine)
	High speed printout	● (35 CPM: 35 ppm/Letter Crosswise) (25 CPM: 25 ppm/Letter Crosswise)
	ECM mode	● (Pass the 2 sec. /Std. document)
	High speed half tone	●
Resolution	Super fine mode	●
	Half tone transmission	●
	Auto retransmission after error	● (ECM)
	Full automatic exposure control	● (Copy/FAX)
	Smoothing	● (FAX function)
	Mixed mode (Text + Photo)	●
Operability	One-touch dialing	● (300 destinations) # of abbreviated dialing number
	Abbreviated dialing	● (500 destinations)
	One-touch program dialing	● (30 destinations) # of one-touch dialing number
	Auto re-dialing	●
	Destination retrieval	●
Utility functions	2-in-1 printout	●
	2-to-1 page transmission	●
	TX marker	● (option)
	FAX/Phone automatic switch	● (Ringer count method)
	Password communication	●
	Multi polling	X
	Polling at regular times	X
	Non storage transmission	●
	Priority transmission	●
	Insert destination	●
	Automatic pause for PSTN number	●
	Power Source saving mode	● (ENERGY STAR®)
	Switch document reading length	● (1 m / 4 m)

Function		(●: available X: unavailable)
Report functions	Activity report (TX/RX)	●
	Transmission report	● (with document margins, Result report)
	Uncompleted transmission report	● (with document margins, Result report)
	Serial broadcast report	● (with document margins, Result report)
	Relay report	● (with document margins)
	User account report	●
	Abbr. dial# list	●
	One-touch dial# list	●
	Fax program list	●
	Relay group list	●
Memory functions	Retransmission	● (destination changeable)
	Document retransmission	●
	Reception by memory	●
	Transmission post	● (30 destinations)
	Memory polling transmission	●
	confidential transmission confidential print	● (F code)
	Serial broadcast	● (210 destinations)
	Relay broadcast	● (F code)
	Memory full control	● (Separate Tx)
	Quick memory transmission	●
	File backup	●
	Rotated Rx	●
	Selective polling	●
System Configuration	Relay transmission	●
	Extra telephone	● (PB forwarding receivable, PSTN - port 1 only)
	Management function per business section	● (100 sections, User management)
	Chain dialing	●
	Inch/mm conversion	●
	PC print	● (Option)
Maintenance	Self diagnostics	● (Memory dump/display, protocol trace, S/W switch list, service call setup)
	Counter per application	●
	Adjust touch panel registration.	●
	Adjust ADF zoom ratio (main/sub)	● (FAX independently)
	Adjust BS zoom ratio (main/sub)	● (FAX independently)

2. CIRCUITRY OPERATION



3. FUNCTION OF CIRCUIT BOARD

Name	Description
MFB2	This board is a micro program control circuit that forms the nucleus of the external 32 bit RISC processor possessing software circuit controls, reading station controls, recording controls, structural controls, operating controls, reading controls, CCD driver circuit, CCD output image process circuit, binary image process circuit, motor controls circuit and sensor I/F circuit.
FAX1	This board performs V.34 facsimile communications, loaded with a V.34 modem. It also possesses clock IC circuit, SRAM circuit for storing different types of registration information, battery back-up circuit for file memory, program ROM (mask ROM: 16MB) and various types of communication system options.
CEN	PC printer functions are achieved via connection of this PKG to the MFB2 board. It also possesses a I/F for network LAN board (FPLAN) use.
NWROM2	This board has 12 or 16MB capacity used as a program ROM.
EMU	This board has 12MB capacity used as working memory.
NWM	This board has 32MB capacity used as working memory. Excluded from specifications with EMU.
NCU	This board is a line controller to detect line signals such as line connection and ringer.
FPLAN	A network function is achieved via connection of this board to a CEN board.

3-1. MFB2 Board

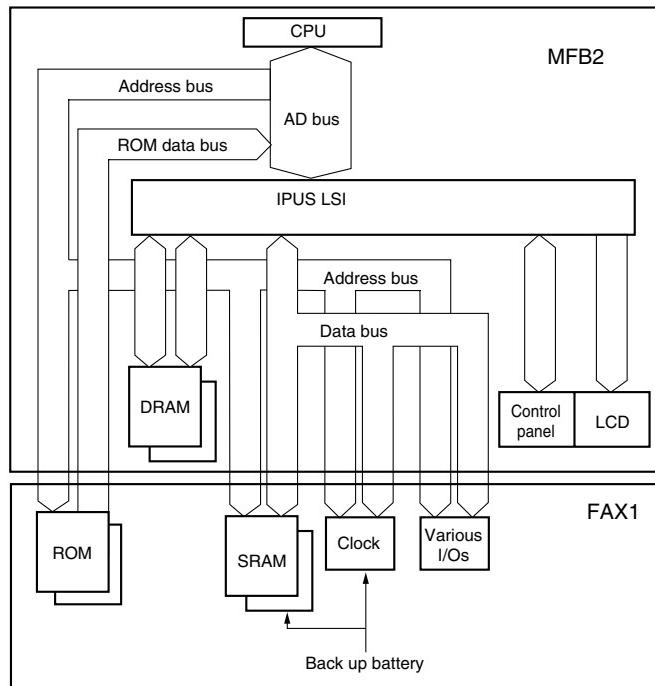
- The MFB board is a main controller that has an external 32 (internal 64) bit RISC processor. It controls several units of the system (e.g., circuitry of each unit, transmitter, reader, printer, mechanically moving parts, and operation) according to system software.
- The MFB2 board has 4 main blocks:

(1) Main Controller

1. Overview

- CPU and an IPUS LSI for controlling several blocks and work memory (DRAM).
- The main controller also uses the information of the backup memory (SRAM) mounted on FAX1 (ROM/RAM) board for various controls.

* Block diagram



4015M502CA

2. Function

- CPU
It uses an external 32 bit RISC processor.
- IPUS LSI
It connects the CPU and the controller for controlling overall operation of the system.
- Program memory (ROM)
The software program for operating the system is stored here.
It has a memory capacity of 16 MB.
- Work memory (DRAM)
This memory serves the work area of the system operation.
Standard memory capacity is 4 MB on the MFB2 board.
- Backup memory (SRAM)
It is a 512KB memory that stores the status information of the system.

3. Backup function

- Method

Backup location	Method	Lifetime	Voltage/current
Battery backup RAM	Lithium battery (discharge type)	5 years approx *	3 V / 1000 mAh
Clock LSI			

*: Daily usage 12 hours - It will last at least 10 years even if the system is always ON.

4. Backup contents

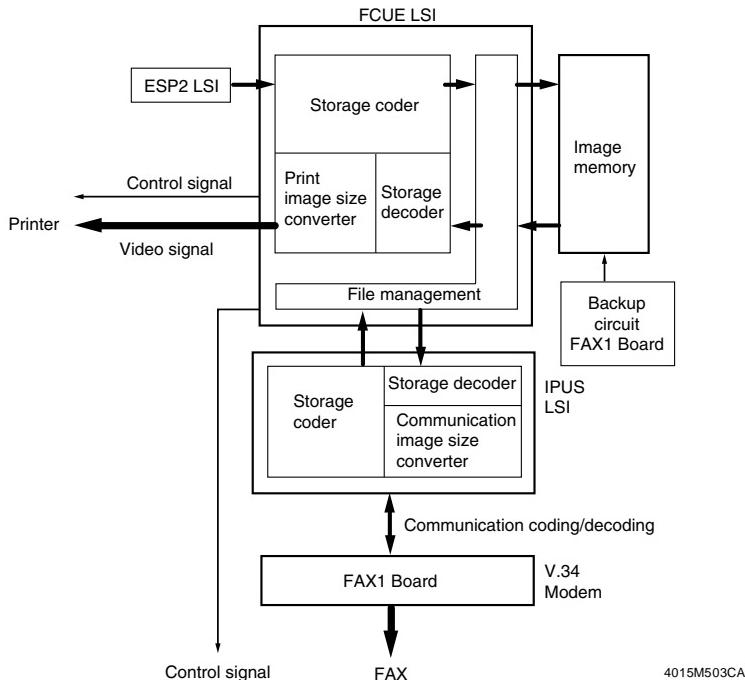
Back up location	Contents
Battery Backup RAM	<ul style="list-style-type: none">• Phone number..... Abbreviated phone numbers• Self-data.....TSI information and serial number are backed up• Soft switch.....Registration data of soft switches• Communication management....Information on activity reports
Clock LSI	Time count

(2) Image Data Processor/FAX Communicator

1. Overview

- This processor has interface blocks with the scanner unit or the printer units, and the FAX communication block.
- It has the storage coder/decoder and a storage code memory manager (FCUE,LSI), image memory (DRAM FILE), a printer controller (FCUE LSI), a modem (V.34), and a communication controller (built in FCUE LSI).
- Each block is controlled by the CPU of the MFB2 board.
- The image memory has an external battery for backup.

* Block diagram



2. Function

A. Storage coder/decoder (FCUE LSI)

- The coder function codes image data into stored code data. The decoder function decodes stored code data into image data.

B. Image memory manager (FCUE LSI)

- This block reads/writes the stored code data through interface units (the scanner, the printer, and the communication units) from/into DRAM FILE by the unit of 1 block.
- The maximum data throughput for DRAM FILE is 320 Mbps. A time division method is used to refresh read/write of the data through the interface units, and DRAM FILE.

C. Image memory (DRAM FILE)

- Standard system has a TMEM board (32 MB) on the MFB2 board CN5.
- The maximum capacity is 64MB by installing another ROT board and a TMEM board on the CN6.

	Installing board	memory capacity
25 / 35 CPM	TMEM	32 MB

D. Printer controller (FCUE LSI)

- It processes the line density conversion for print image data (serial data) from the storage decoder, and stores it in the internal frame memory.
- The converted data is read synchronized with the PPC printer, added information on the left margin and the white mask, and then output to the printer as serial data.
- The frame memory can hold up to 20 Kbit of data to be output to the printer.
- The printer controller exchanges commands/statuses for controlling the printer unit.

E. Communication controller (FCUE LSI and IPUS LSI)

- This controller performs necessary functions (relay control, ringer detection, line connection detection, polarity reverse detection, dialing and pulse sending) for G3 communication.
- It also detects the frequency of the tonal signal of G3 communication.

3-2. FAX1 Board

- This board comes loaded with a G3 modem for communicating V.34 facsimile communications.
- It also possesses clock IC circuit, SRAM circuit for storing different types of registration information, battery back-up circuit for file memory, program ROM (mask ROM: 16MB) and optional I/F for different types of communication systems.
- This item describes functions other than for the FAX1 board described in the MFB2 board.

1. Modem (V.34 modem)

- This modem is configured with a digital signal processor, analog front-end that converts A/D and D/A, modem F/WROM and Book memory (SRAM).
- It conforms to electrical communications conditions provided in recommended V.8, V.34, V.17, V.29, V.27ter, V.21ch2, T.3, and T.4. It also follows the T.30 binary signal procedure. The transmission speeds are 33600, 31200, 28800, 26400, 24000, 21600, 19200, 16800, 14400, 12000, 9600, 7200, 4800, 2400, and 300 bps.
- It also transmits PB tones when calling PB. This modem is positioned on the memory map on the MFB2 board.

2. Communication controller (FCUE LSI and IPUS LSI)

- It achieves relay controls, ringer detection, closed DC line wire connection detection and dial pulse functions.
- It also detects tonal frequencies in G3 procedures.

3. Image memory backup circuit

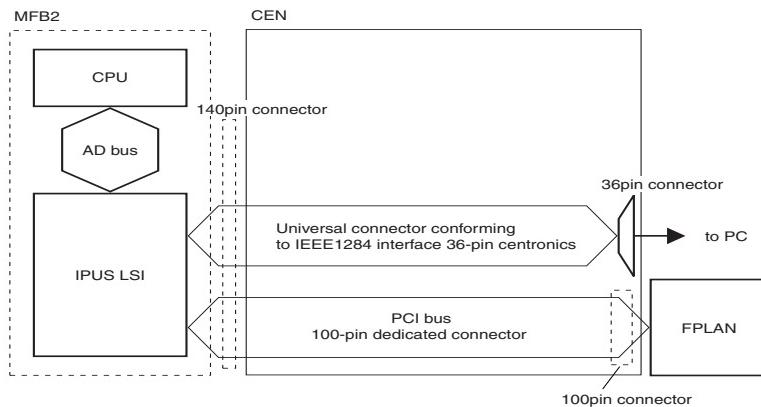
- It maintains memory capacity by switching the power supply when the device power is OFF or during a power failure from the battery for a maximum image memory of 64MB.

3-3. CEN Board

1. Overview

- This board is configured with a 36-pin bi-directional centronics interface and a network LAN board interface with PCI bus for use as PC printer font and PC printer.

* Block diagram



4015M504CA

2. Function

- 36-pin centronics interface (universal connector)

The system has the IEEE1284 interface (the Centronics interface) as a standard interface to be used as a PC printer for future expansion.

- PCI bus (special connector)

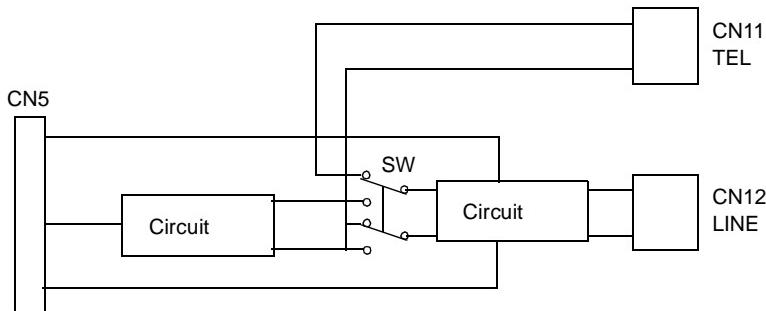
It achieves network functions through network board (FPLAN) connection. This connector is not a cartridge-type interface but a dedicated connector (100 pin) for the original board (FPLAN). Therefore, the market-available PCI bus port cannot be connected.

3-4. NCU Board

(1) Overview

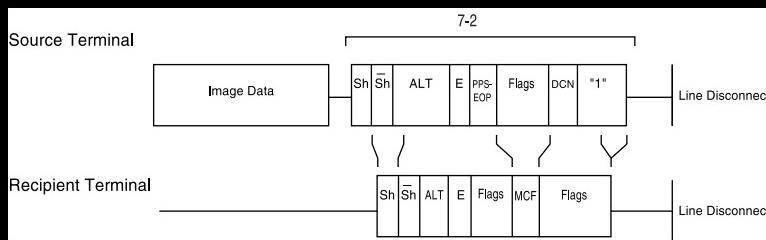
- The NCU board has various functions such as line connection, ringer detection, off-hook detection, polarity detection, and dialing pulse transmission.

* Block diagram



(2) Function of each block

- LINE is a modular port for connecting a phone line.
- TEL is another modular port to connect an extra telephone set.
- The dialing pulse transmitter outputs dial pulses controlled by the MFB2 board.
- The ringer detector provides an automatic reception function. It isolates a receiver ringer signal with a photo-coupler, and outputs it to the MFB2 board. The ringer signal is counted by the counter of G/A.
- The polarity detector uses two photo-couplers to detect the DC polarity of the line. If either of the detected signals is "1", the other signal is "0".
- The off-hook detector shares a circuit with the polarity detector, and detects off-hook, i.e., direct current.



(1) V3.4 Mode Communication Procedure

V3.4 mode does not always select the transmission speed of 36.6Kbit/s. An optimal transmission speed will be selected according to the sequences described in the item 3 and 4 below in order to establish communication.

- Transmission speed : 36.6 to 2.4 Kbit/s (by 2.4 K step)
 - Symbol rate : 6 rates (5 rates are supported)
3429, 3200, 3000, 2800, (2743), 2400 symbol/s
1. CNG
 - Calling tone
A monotone signal of 1100 Hz, transmitted with the period of 0.5 sec ON and 3 sec OFF.
 2. V.8
 - Modem ID sequence
A 300 bit/sec. signal.
 - This sequence exchanges information on function types and modulation methods with a remote terminal. The following sequences will be proceeded with the modulation method that both terminals have among the exchanged system information.
 3. Line probing
 - Sequence to measure line characteristics.
 - This sequence measures the line characteristics by exchanging signals between two modems.
The symbol rate will be determined by this sequence. This sequence will be one of basis for data to determine the transmission sequence.
 4. TRN
 - Equalizer training sequence
 - This sequence corresponds to the conventional procedure TCF. Sending a signal with the fastest transmission speed specified by the remote terminal sets the equalizer of the modem of the receiver terminal.
 5. Control channel
 - Sequence to determine modem parameters and system parameters.
A signal of 1200 bit/sec.
 - It corresponds to the conventional procedure of phase B.
 - A. A sequence for determining modem parameters
 - It determines the transmission speed of the primary channel by the results of the line probing sequence and TRN (equalizer training sequence).
 - B. Sequence to determine system parameters
 - The same sequence as the conventional phase B procedure.
 6. Primary channel
 - Sequence for transmitting image data.
 - It corresponds to the conventional phase C procedure.
 7. Control channel
 - It corresponds to the conventional phase D procedure. A signal of 1200 bit/s.
 - A. Sequences between pages when there are multiple pages.
 - B. Page termination sequence.

4-2. Communication Mode

(1) Priority

- This system has two communication modes: ECM and G3. Communication will be established with an appropriate mode determined by the capability of the remote terminal. The priority of the communication modes is as follows:

Priority	Communication mode	Remark
1st	ECM	Followed ITU-T (Previously CCITT) recommendation (Can communicate with other company's system). Error correction by procedure signals.
2nd	G3	Followed ITU-T (Previously CCITT) recommendation (Can communicate with other company's system)

Note:

G4/UHS/G2/MF modes are unavailable to the system.

(2) Communication modes of ECM/G3

An optimal mode will be selected according to the capabilities of both terminals:

		RX (Receiver)				
		V.34/ECM	V.17/ECM	V.17/G3	V.29/ECM	V.29/G3
TX (Sender)	V.34/ECM	V.34/ECM	V.17/ECM	V.17/G3	V.29/ECM	V.29/G3
	V.17/ECM	V.17/ECM	V.17/ECM	V.17/G3	V.29/ECM	V.29/G3
	V.17/G3	V.17/G3	V.17/G3	V.17/G3	V.29/G3	V.29/G3
	V.29/ECM	V.29/ECM	V.29/ECM	V.29/G3	V.29/ECM	V.29/G3
	V.29/G3	V.29/G3	V.29/G3	V.29/G3	V.29/G3	V.29/G3

V.34: 33600 ~ 240 bps starting mode

V.17: 14000 bps starting mode

V.29: 9600 bps starting mode

<<2>> Encoding Method

There are 4 encoding methods available to this system: JBIG, MMR, MR, MH. An optimal method will be selected according to the capabilities and image quality of both terminals.

Encoding method	Binary priority	Remark
JBIG	1st	ECM
MMR	2nd	ECM
MR	3rd	
MH	4th	

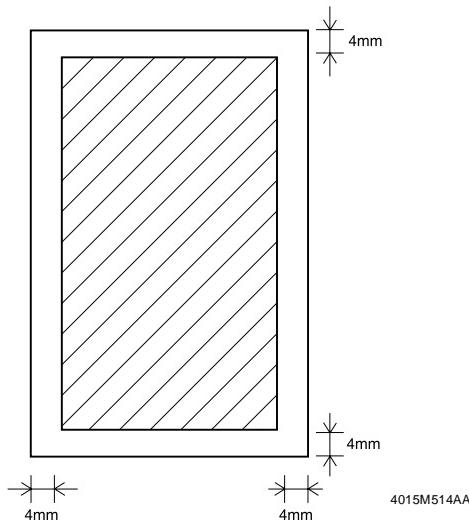
Note:

UMH/UMR are unavailable to the system.

5. SELECTING PAPER

5-1. Printing Area

- The figure below shows the printable area on the paper.
- The minimum margins are 4 mm*.
- *: The minimum margins can be adjusted with Edge erase adjustment.



5-2. Printing Mode

- There are 2 printing modes available to this system. The soft switch (MODE 007) toggles these modes. They are valid only for printing received documents.

(1) Automatic reduction mode

- If the length of a received document exceeds the printable area, this mode cuts off the document within the cutting length specified with the soft switch (MODE 007). If the excess length is longer than the specified cutting off length, the document will be reduced within the upper limit of reducing the size specified with the soft switch (MODE 007).

(2) Cut off mode

- If the length of a received document exceeds the printable area, this mode cuts off the document within the cutting length specified with the soft switch (MODE 007). (No reduction.)

5-3. Paper Selection Mode

- This system has the following modes for selecting paper. The soft switch (MODE 008) toggles these modes.
- They are valid only for printing received documents.

(1) Standard mode

- This mode selects paper to avoid document splitting as much as possible.

<Example>

Available sizes of paper : A4 Lengthwise and A3 Lengthwise

Size of received document : B4 Lengthwise

Printing mode : Automatic reduction (Upper reduction limit of 65%)

In this case, the system will use the A3 paper without reduction. If the A3 paper has run out, the Letter Lengthwise paper will be used with reduction.

(2) Width preference mode

- This mode selects paper whose width is the same as or smaller than a received document.

<Example>

Available sizes of print paper : A4 Lengthwise and A3 Lengthwise

Size of received document : B4 Lengthwise

Printing mode : Automatic reduction (Upper reduction limit of 65%)

In this case, the system will use the A3 paper with reduction. If the A3 paper has run out, the printing job will be halted and wait for new paper.

(3) Fixed width mode

This mode selects paper whose width is the same as a received document.

<Example>

Available sizes of paper : A4 Lengthwise and A3 Lengthwise

Size of received document : B4 Lengthwise

Printing mode : Automatic reduction (Upper reduction limit of 65%)

In this case, the system will use the B4 paper with reduction. If the B4 paper has run out, the printing job will be halted and wait for new paper.

Note:

The standard and the preference modes have 4 different submodes. Each of them has priorities for selection. (Users can select only submode1.)

- Submode 1 : Selecting a paper whose width is the same as a received document without reduction.
 - Submode 2 : Selecting a paper whose width is the same as a received document with minimum margins (minimum non printing area).
 - Submode 3 : Selecting a paper to print out without reduction.
(The width will not be considered.)
 - Sub mode 4 : Selecting a paper with minimum nonprinting area.
(The width will not be considered.)
-

* The following table summarizes the effective print length for paper which this system can use :

L: Lengthwise, C: Crosswise (Unit: mm)

Print paper size Letter L	Print paper size		Effective print size		Remark
	Sub scanning length	Main scanning length	Subscanning length	Main scanning length	
	215.9	279.4	207.4	271.4	
A5 C	148.0	210.0	140.0	202.0	
B5 C	182.0	257.0	174.0	249.0	
B5 L	257.0	182.0	249.0	174.0	Note 1
A4 C	210.0	297.0	202.0	289.0	
A4 L	297.0	210.0	289.0	202.0	
B4 L	364.0	257.0	356.0	249.0	
A3 L	420.0	297.0	412.0	289.0	

Note 1: Available only with a multi-purpose tray or manual feeding (Copy and PC print).

6. LIST OF REPORTS

○: available - : not available

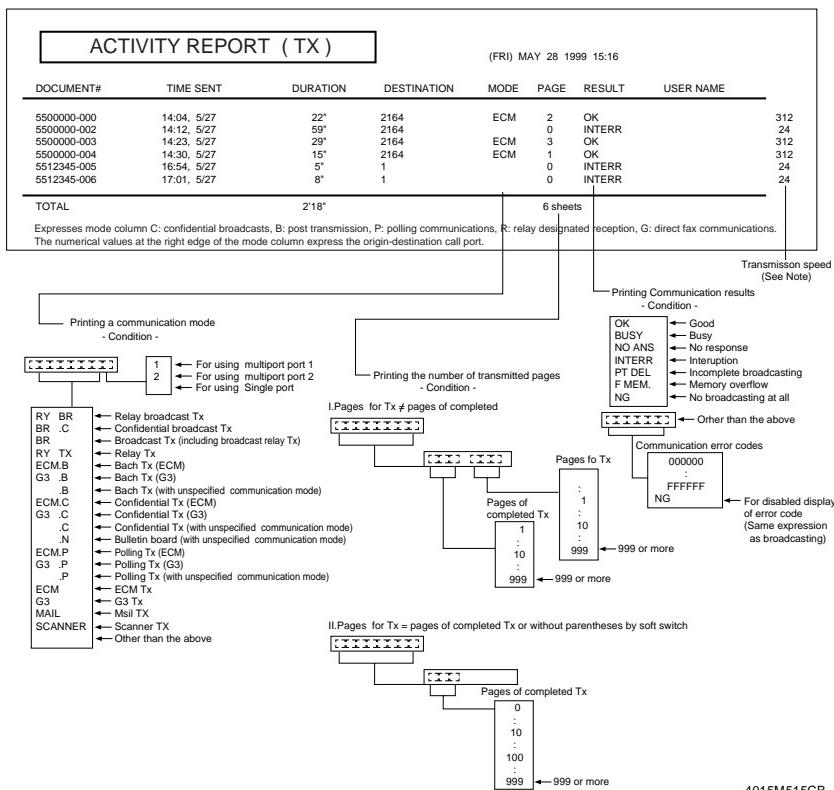
	Report name	Auto print	Manual print	Reference
Transmission management	TRANSMISSION REPORT	○	-	Operator's Manual
	SERIAL BROADCAST REPORT	○	-	Operator's Manual
	TRANSMISSION REPORT (incompleted)	○	-	Operator's Manual
Statistical management	ACTIVITY REPORT (TX)	○	○	ES M-19
	ACTIVITY REPORT (RX)	○	○	ES M-20
	ACCOUNT COUNT REPORT	-	○	Operator's Manual
	NETWORK PRINTING REPORT	-	○	ES M-21
Memory management	MEMORY CLEAR REPORT	○	-	Operator's Manual
List	ONE-TOUCH DIAL # LIST	-	○	Operator's Manual
	ABBR. DIAL # LIST	-	○	Operator's Manual
	FAX PROGRAM LIST	-	○	Operator's Manual
	BULLETIN BOARD LIST	-	○	Operator's Manual
	RELAY GROUP LIST	-	○	Operator's Manual
	ACCOUNT LIST	-	○	Operator's Manual
	ACCOUNT MANEGEMENT LIST	-	○	Operator's Manual
	SETTING LIST	-	○	Operator's Manual
Relay management	RELAY REPORT	○(TX)	-	Operator's Manual
Maintenance	G3 PROTOCOL TRACE	○	-	ES M-22
	MEMORY DUMP	-	○	ES M-23
	FILE DUMP	-	○	ES M-23
	SERVICE CALL REPORT	○(TX)	-	ES M-24

Note:

- Setting up the soft switch (MODE 020 Bit 3) is necessary to include communication error codes in a report.
- Setting up the soft switch (MODE 020 Bit 7) is necessary to include the number of pages in a report.
- The soft switch (MODE 023 Bit 3) can specify a transmission report with or without the image merge function.
- Setting up the soft switch (MODE 020 Bit 5) is necessary to include the transmission speed in an Activity Report (TX/RX).

7. HOW TO READ DATA OF REPORTS

7-1. Activity Report (TX)



4015M515CB

Note:

- **Printing reports:**

With automatic LOGOUT: All information on 50 communication activities will be printed.

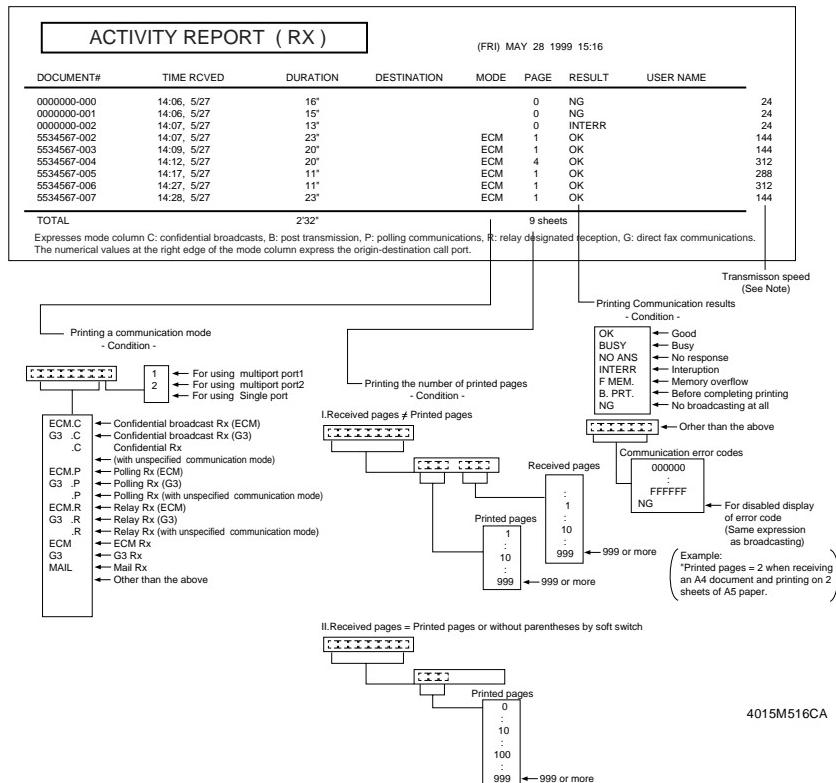
With manual printing : All information on the last 50 communication activities (if there are over 50 activities).

- Communication error codes will be listed only when requested to print (MODE 020 Bit 3).
- "Transmission speed" on the right side requires the soft switch setting (MODE 020 Bit 5).

(1) Print by manual

1. Press the "Utility" key.
2. Press the "Report" key.
3. Press the "Report 1" key.
4. Press the "TX Act Report" key.

7-2. Activity Report (RX)



Notes:

- **Printing reports:**
With automatic LOGOUT: All information on 50 communication activities will be printed.
With manual printing : All information on the last 50 communication activities (if there are over 50 activities).
- Communication error codes will be listed only when requested to print (MODE 020 Bit 3).
- "Transmission speed" on the right side requires the soft switch setting (MODE 020 Bit 5).

(1) Print by manual

1. Press the "Utility" key.
2. Press the "Report" key.
3. Press the "Report 1" key.
4. Press the "RX Act Report" key.

7-3. Network Printing Report

P. 1

NETWORK PRINTING REPORT			(FRI) MAR 16 2001 13:00		
Rx Time	Protocol	IP Address	Size	Status	Session
April 23 at 11:15 am	9100	192.168.100.123	12345	OK	1
April 23 at 11:15 am	9100	192.168.100.123	14653	OK	1
April 23 at 11:15 am	9100	192.168.100.123	16543	OK	1

Diagram illustrating the mapping of columns in the table:

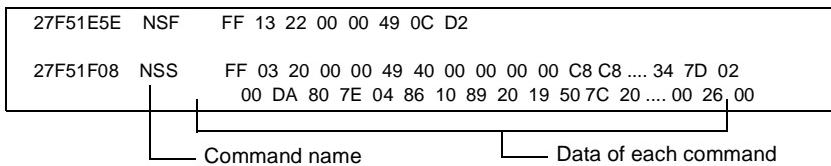
- Time and date of receipt → Rx Time
- IP address → IP Address
- Host IP address where connection is established → IP Address
- Application protocol name → Protocol
- lpr → Protocol
- ftp → Protocol
- 9100 → Protocol
- Data Size → Size
- Print results → Status
- OK → Status
- Timeout → Status
- Error → Status
- Number of queue sessions → Session

(1) Print by manual

1. Press the "Utility" key.
2. Press the Utility key.
3. Press the Meter Count key.
4. Press the following keys in this order:
Stop → 0 → 0 → Stop → 0 → 2
5. Press the "Utility" key.
6. Press the "Report" key.
7. Press the "Report 1" key.
8. Press the "NETWORK PRINTING REPORT" key.

7-4. Protocol Trace

- Each communication processes information on a protocol trace.



Note:

- Specify FCF names with capital letters for signals at 300 bps, otherwise use small letters.
- If the information of a single frame is longer than a single line, the next line will also be used. This will be repeated as necessary.
- If there is no FCF name corresponds to the data in the FCF field, "?" will be displayed in the FCF name field.
- If the information cannot be printed in a single sheet of a specified paper, the excess information will be printed on the next paper.

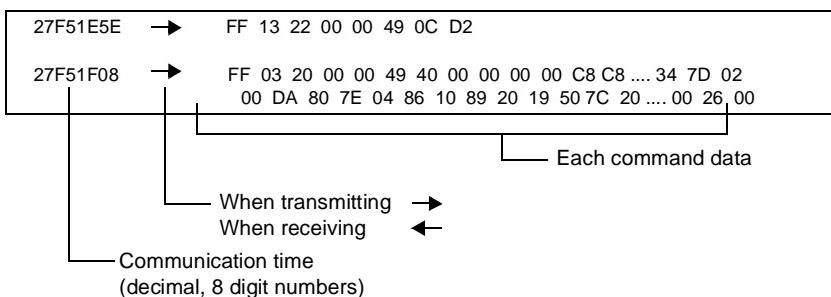
(1) Print by manual

- Press the "Utility" key.
- Press the Utility key.
- Press the Meter Count key.
- Press the following keys in this order:
Stop → 0 → 0 → Stop → 0 → 2
- Press the "Utility" key.
- Press the "Report" key.
- Press the "Report 1" key.
- Press the "Protocol Trace" key.

7-5. Network Protocol Trace

- Each communication processes information on a protocol trace.

If you wish to print it, go to the maintenance mode to press <Utility>. Then touch [Report 1] to specify [Protocol Trace]



7-6. Memory Dump & File Dump

- Memory dump and file dump have the same format.
- Produces hard copy data used for analysis of internal data.

00080000 3653B850348ED88D365B01E878005B07 6C.P4...6.....
00080020 54A3B700F6443401740B804C34808064 T....D4....L4...
└ Prints physical address └ Prints contents └ Prints ASCII code of the contents
00000000
:
FFFFFFF

(1) Print by manual

1. Press the “Utility” key.
2. Press the Utility key.
3. Press the Meter Count key.
4. Press the following keys in this order:
Stop → 0 → 0 → Stop → 0 → 2
5. Press the “Utility” key.
6. Press the “Maintenance Mode” key.
7. Press the “Memory Dump” or “File Dump” key.

Notes

- The hard copy data involves about 100 pages.
-

7-7. Service Call Report

(1) Content

- You can output the service call report to your terminal manually. The service call report will be transmitted to the Service Center automatically with a specified alarm.
- When this report is transmitted, it always includes "TSI" (even if this function is disabled).

REPORT CONTENTS :		SERVICE CALL REPORT		P.1
DATE CALLED :				
USER INFO TEL1 :		TEL2 :		
ISDN :		ID :		
CALL CONDITION TRANS.METHOD: DATA				
CALL #: G3-1 :				
E-MAIL MAINTENANCE : OFF		ADDRESS :		
FAX DEST. # :		INFO. CALL :		User System Code :
# OF PRINT : OFF		PRT MALFUNCTION : ON		PRT OPTION : OFF SCANNER MALFUNCTION : ON
NO TONER NOTICE : ON		TONER EMPTY : ON		DRUM LIFE : ON
TONER / DRUM A NEAR LIFE		TONER / DRUM A LIFE : ON		TONER / DRUM B NEAR LIFE : ON TONER / DRUM B LIFE : ON
SERIAL # : ABCDE12345				

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1. REPORT CONTENTS

This report has the reason for transmission and the date of transmission.

- # OF PRINT
- PRT MALFUNCTION
- PRT OPTION MALFUNCTION
- SCANNER OPTION MALFUNCTION
- TONER NEAR LIFE (Status C) 5K
- TONER NEAR LIFE (Status C) 10K
- DRUM NEAR LIFE (Status D)
- DATE CALLED

2. USER AND TERMINAL INFORMATION

This report has various information on users and terminals of your facsimile system.

A. Phone number

- ID
- USER INFO TEL1
- USER INFO TEL2

B. The dialing condition of transmitting the service call report

- TRANS. METHOD (DATA/REPORT/MAIL)
- CALL #
- E-MAIL MAINTENACE
- ADDRESS
- FAX DEST. #
- INFO CALL
- USER SYSTEM CODE
- # OF PRINT
- PRT MALFUNCTION
- PRT OPTION MALFUNCTION
- SCANNER OPTION MALFUNCTION
- NO TONER NOTICE
- TONER EMPTY
- DRUM LIFE

- TONER NEAR LIFE (Status C)
- DRUM NEAR LIFE (Status D)

C. SERIAL#

D. ROM REV

- MAIN (MSC)
- PRINTER
- ADFR
- LCC
- FINISHER

E. INSTALL DATE

F. MAINTENANCE DATE

G. MACHINE CONFIGURATION

- F MEM (7.6/8.0/15.6/23.6/47.6/55.6 MB)
- R MEM (8.3/0.0 MB)
- WORK MEMORY (4.0/16.0 MB)
- FAX (ON/OFF)
- PORT (SINGLE/MULTI)
- LINE (PSTN1 or PSTN1+PSTN2)
- PC PRINT (ON/OFF)
- ADF (NONE/ADF/ADFR)
- TX MARKER (ON/OFF)
- BS/IR (ON/OFF)
- SCAN SPEED
- SCAN QUALITY (400/600dpi)
- PRINT SPEED
- I/C TYPE (T-1,T-2,T-3,T-4)
- 2 SIDED (ON/OFF)
- JOB TRAY (ON/OFF)
- SHIFT TRAY (ON/OFF)
- FINISHER (ON/OFF)
- MAIL FINISHER (ON/OFF)
- TTL COUNT (ON/OFF)
- BOOKLET STAPLE (ON/OFF)
- SINGLE STAPLE (ON/OFF)
- OPTION TRAY (ON/OFF)
- SIZE SSR OPT (ON/OFF)
- CASSETTE 1 TO 5
- SCANNER (ON/OFF)
- CONTROLLER (ON/OFF)

H. VARIOUS SETTING

- AUTO PAPER MODE (INCH/METRIC)
- FLS
- COPY MODE (1-SIDED/2-SIDED OR 2-SIDED ONLY)
- ANTI-DEW (SCAN or SCAN & DRUM or NO FUNCTION)
- LTD COPY (OFF/ON)
- PAPER SIZE INPUT (2ND Cassette)
- PAPER SIZE INPUT (3RD Cassette)
- PAPER SIZE INPUT (4TH Cassette)

- PAPER SIZE INPUT (5TH Cassette)
 - ERASURE WIDTH
 - ZOOM (B4 → A4)
 - ZOOM (A3/A4 → A4/A5)
 - ZOOM (x 0.5)
 - ZOOM (B4 → A3)
 - ZOOM (A4/A5 → A3/A4)
 - ZOOM (x 2.0)
 - ZOOM (FULL SIZE)
 - ZOOM (FULL SIZE)
 - TOTAL COUNTER
 - SIZE COUNTER
 - COPY KIT COUNTER
 - PLUG-IN COUNTER
 - KEY COUNTER
 - VENDER MODE
3. COUNTER INFO
- TOTAL COUNTER
Count of TOTAL, SIZE, FAX PRT, COPY PRT, REPORT, etc.
 - PAPER COUNTER
Count for each size of paper and paper type.
 - JAM COUNTER
Count of misfeeds.
 - PM COUNTER
Count of maintenance.
 - TROUBLE COUNTER
Count of trouble

4. ADJUST INFO

* For scanner

- NADF MAIN REG
- NADF SUB REG
- NADF M-SCAN % (COPY)
- NADF S-SCAN % (COPY)
- NADF M-SCAN % (FAX)
- NADF S-SCAN % (FAX)
- BK-S M-SCAN REG
- BK-S S-SCAN REG
- BK-S M-SCAN % (COPY)
- BK-S S-SCAN % (COPY)
- BK-S M-SCAN (FAX)
- BK-S S-SCAN (FAX)
- ADFR DOC. STOP (1-SIDED)
- ADFR DOC. STOP (2-SIDED)
- ADFR DOC. STOP (SINGLE FD)
- ADFR REGISTRATION LOOP

* For printer

- REGIST. (CD) 1ST
- REGIST. (CD) 2ND
- REGIST. (CD) 3RD
- REGIST. (CD) 4TH
- REGIST. (CD) 5TH
- REGIST. (CD) 2-SIDED
- REGIST. (FD)
- LOOP ADJ. (1ST)
- LOOP ADJ. (OTHERS)
- LOOP ADJ. (2-SIDED & MAN)
- EDGE ERASE LEAD
- EDGE ERASE TRAIL
- EDGE ERASE (R/L)
- ID
- ATDC SENSOR GAIN
- VG
- PUNCH-LOOP

5. Error LOG information

A. History of jams

This report contains and prints the last 10 misfeed incidents. When the number of incidents exceeds 10, the oldest one will be deleted.

- Date and time of misfeeds
- Location of jams (scanner or copier)

B. History of system malfunctions

This report contains and prints the last 10 incidents. When the number of incidents exceeds 10, the oldest one will be deleted.

- Date and time of malfunctions
- Malfunction codes

C. History of FAX communication errors

This report contains and prints the last 10 incidents. When the number of incidents exceeds 10, the oldest one will be deleted.

- Date and time of communication errors
- Communication error codes

D. History of E-mail communication errors

This report contains and prints the last 10 incidents. When the number of incidents exceeds 10, the oldest one will be deleted.

- Date and time of communication errors
- Communication error codes

6. Information on oft switches

- This report has information on the soft switches of the main product (1000 byte).
- The default setting will also be printed for the switch that was set up differently.

(2) Print by manual

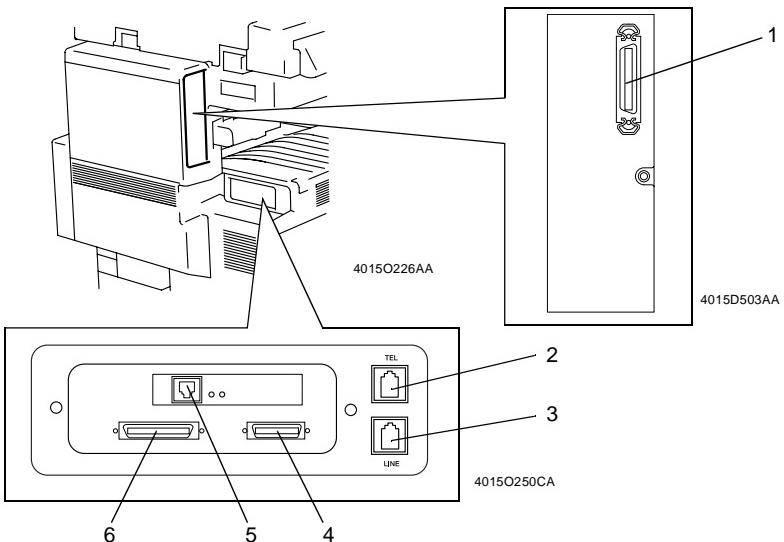
1. Press the “Utility” key.
2. Press the Utility key.
3. Press the Meter Count key.
4. Press the following keys in this order:
Stop → 0 → 0 → Stop → 0 → 2
5. Press the “Utility” key.
6. Press the “Report” key.
7. Press the “Report 1” key.
8. Press the “NETWORK PRINTING REPORT” key.

DIS/REASSEMBLY, ADJUSTMENT



1. CONNECT THE CABLES

1. Connect cables from the phone line and other devices with the system as shown below



No.	Name	Connect to	Remark
1	Engine interface	Printer Controller	Option (Printer Controller)
2	TEL	Extra telephone set	Standard
3	LINE	Phone line	Standard
4	Parallel	PC print option	Option (Printer Controller)
5	Network	LAN (PC print option)	Option (Printer Controller)
6	Engine interface	Printer Controller	Option (Printer Controller)

2. Connect the power source cable.

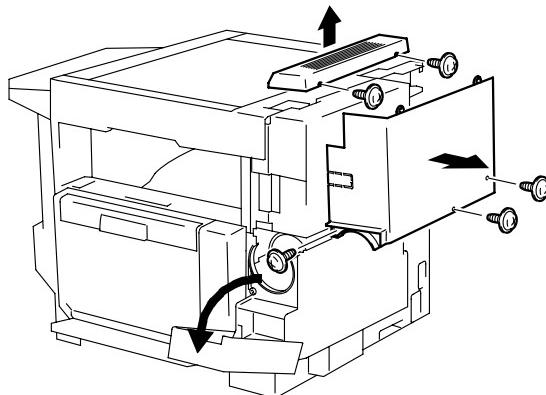
This facsimile uses the rated voltage of 220 ~ 240 V, 50/60 Hz.

The power source line must be rated more than 12 A.

2. DISASSEMBLY/REASSEMBLY

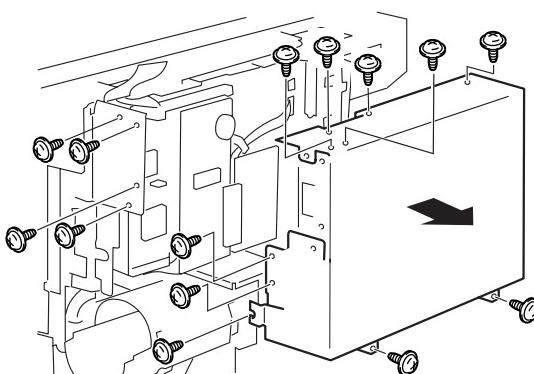
2-1. FAX1 Board

1. Remove two screws and the Rear Upper Cover.
2. Open the Toner Bottle Cover.
3. Remove three screws and the Rear Cover.



4967D001AA

4. Remove screws (14 or 12) and the shield cover.

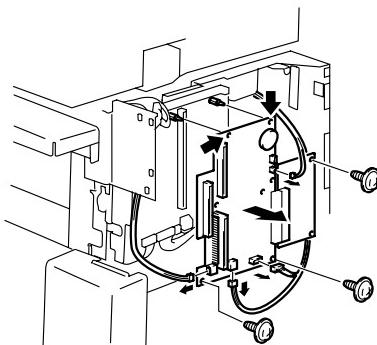


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NOTE

- The number of screws used differs according to the applicable marketing area.
-

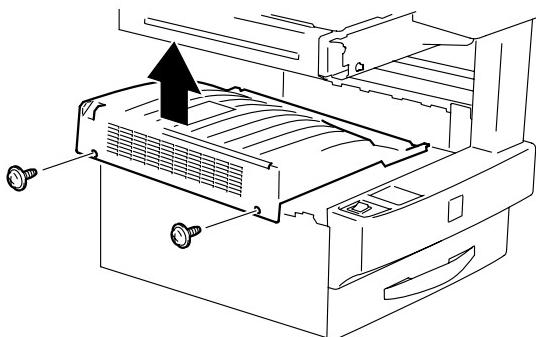
5. Unplug four connectors of the FAX1 Board.
6. Remove three screws and the FAX1 Board.



4015D017AB

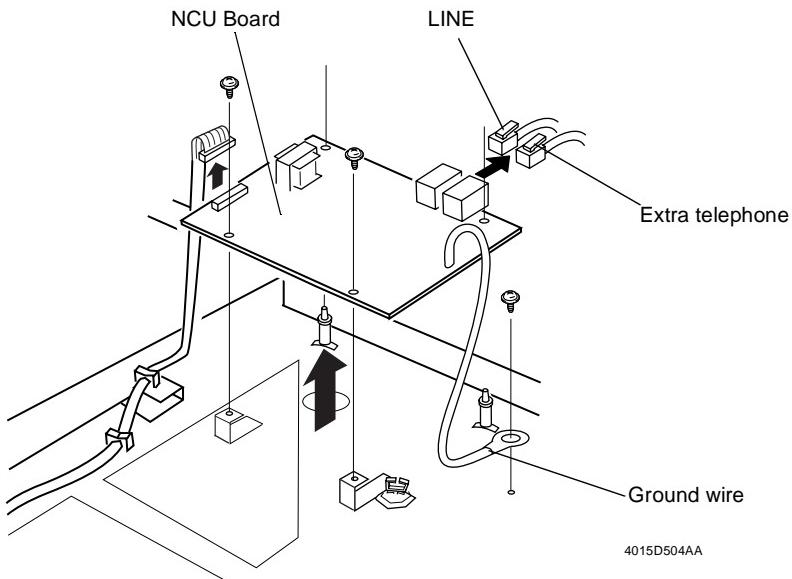
2-2. NCU Board

1. Remove two screws and the Upper Cover.



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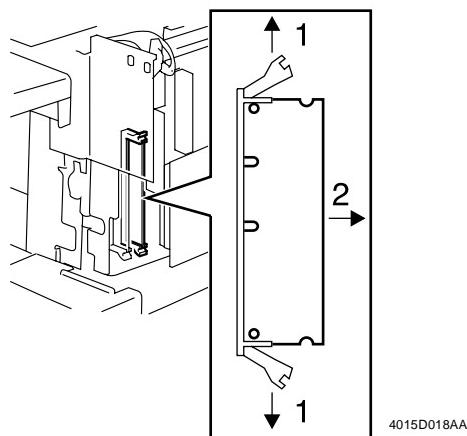
2. Unplug three connectors of the NCU Board.
3. Remove one screw and Ground wire.
4. Remove two screws and NCU Board.



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2-3. Optional Memory Board

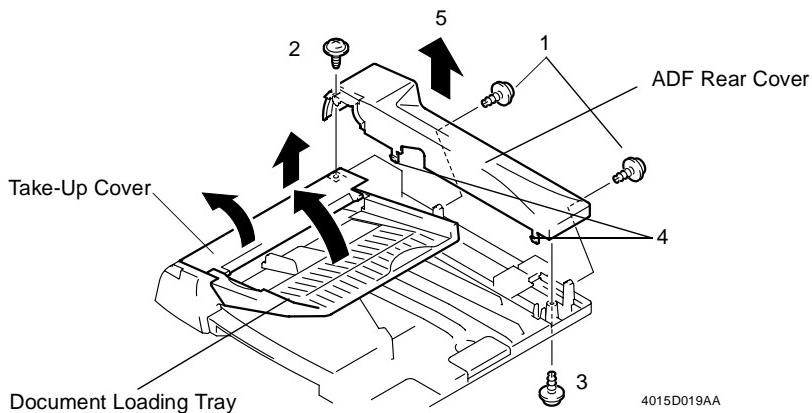
1. Remove an add-on memory board of the MFB2 Board CN6.



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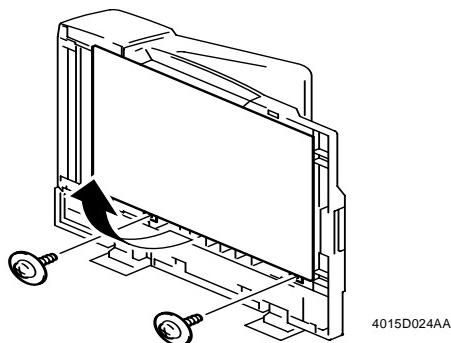
2-4. TX (Transmission) marker

1. Remove two screws from the backside of the ADF.
2. Open the Take-Up Cover of the Document Loading Tray to remove a screw.
3. Open the ADF to remove a screw from the right corner.
4. Remove two fixtures.
5. Detach the ADF cover (R).



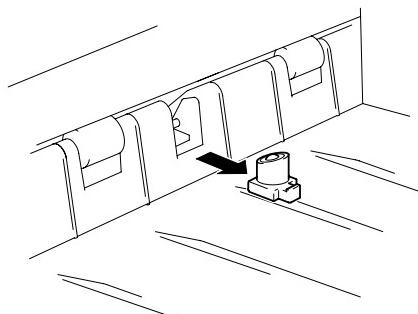
4015D019AA

6. Remove two screws and the cushion from the back side of the ADF cover.



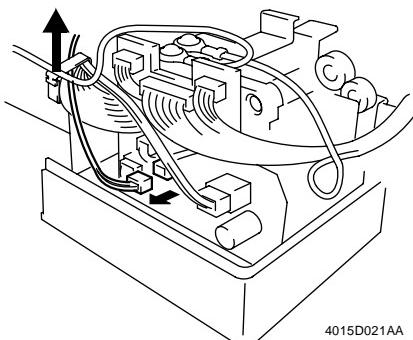
4015D024AA

7. Remove the ink stamp into the TX Marker.



4015D020AA

8. Connect the cables of the TX Marker to the connector of the ACR (CN-7) (MARKER)

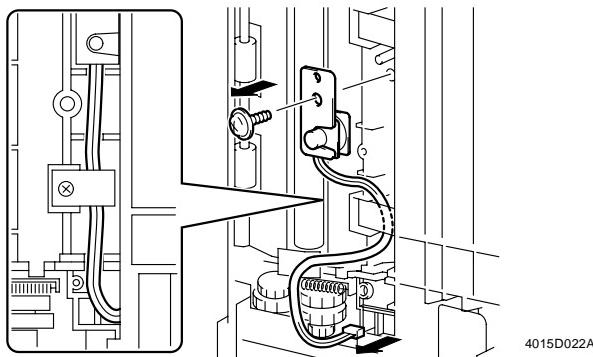


4015D021AA

9. Remove one screw and TX Marker.

NOTE:

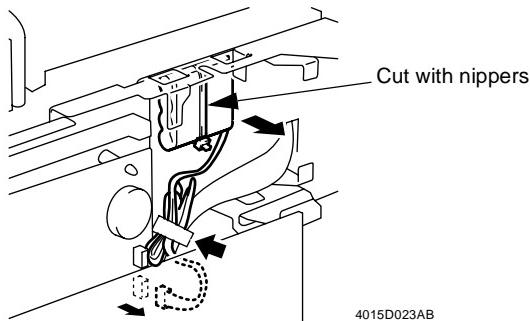
- The shaft of the TX Marker should not come out.
-



4015D022AA

2-5. Battery Replacement

1. Check the amount of used memory displayed on the LCD.
When the amount of the remainder of the memory is not 100%
 - The content of the memory is output.
 - Waits until becoming transmission completion of the document.
2. Turn OFF the machine.
3. Unplug three connectors of the FAX1 Board, and remove the harness from cord clamp.
4. Tie band is cut with nippers, and the Ni-MH battery is replace.



5. Turn ON the machine.

2-6. Adjustment for FAX

(1) Zoom Adjust for FD and CD (FAX)

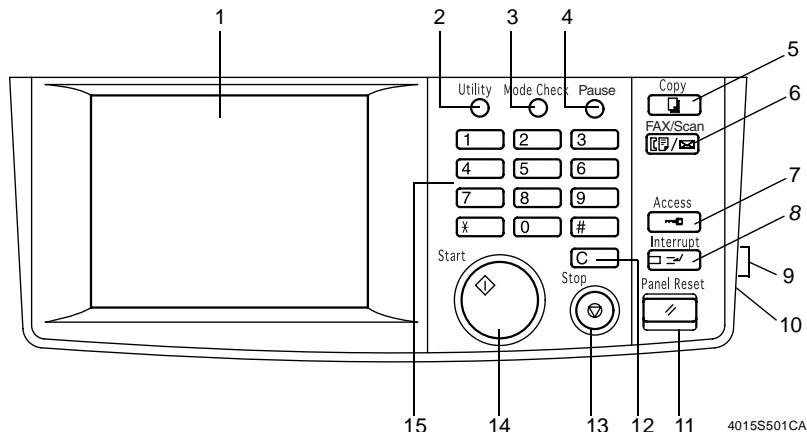
- This mode is for factory adjustment only and should NOT be used.

SOFT SWITCHES, SERVICE MODE



1. CONTROL PANEL KEYS AND TOUCH PANEL

1-1. Control Panel Keys



1. Touch Panel

- Shows various screens and message.

2. Utility Key

- Press to show the Utility Mode menu.

3. Mode Check Key

- Lists the current settings on the screen.
- Access to register the current settings in a program.

4. Pause Key

- Press this key for a preset pause when dialing.
- It is useful to provide dial waiting period, such as when accessing public lines from an extension line or receiving information services.

5. Copy Key

- Press to select the Copy mode.

6. FAX/Scan Key

- Press to select the FAX/Scan mode.

7. Access Mode Key

- Press to enter the access number when Copy Track of the Administrator mode available.

8. Interrupt Key

- Press to select the Interrupt mode.

9. Display Contrast Control Knob

- Adjust the brightness of the Touch Panel.

10. Warm Restart Switch

- Used to enter the initial mode.

11. Panel Reset Key

- Press to set the machine into the initial mode, clearing all settings made on the control panel.

12. Clear Key

- Clear the various numeric values.

13. Stop Key

- Stop a print cycle.
- Stop a scanning cycle.

14. Start Key

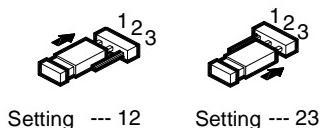
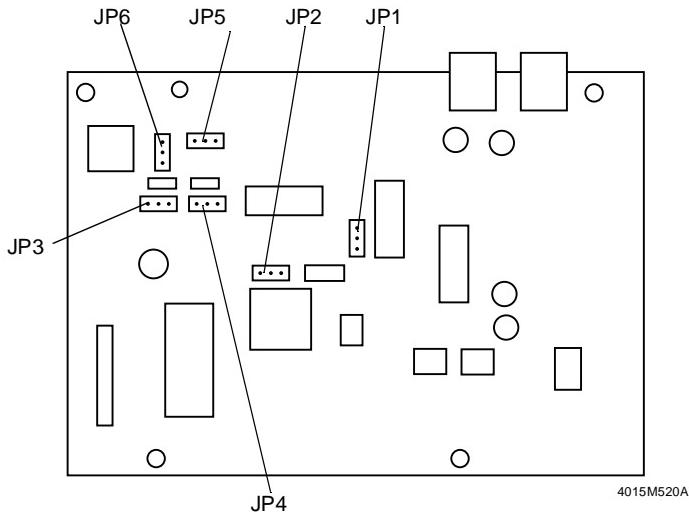
- Start a print cycle.

15. 10-Key Pad

- The number of copies to be made.
- The various numeric values.

1-2. Jumper switch on NCU board

- There are 6 jumpers on NCU board. Each jumper has 12 or 23.



4015M519AA

- You can adjust the 6 jumpers for every marketing area, the jumpers position as below list.
- The default marketing area of this machine set as CTR-21.

* Jumper switch setting.

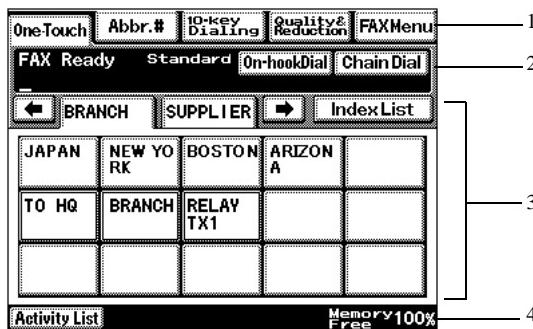
Type	JP1	JP2	JP3	JP4	JP5	JP6	Country
STD	12	12	12	12	23	23	USA, Canada, Singapore, Malaysia, Iran, Hong Kong, Russia, Bahrain, Qatar, Czech, Poland, Hungary, Slovakia, Croatia, Baltic, Slovenia, Romania, Ukraine, Kuwait, UAE, Philippine, Taiwan, Korea, New Zealand
CTR-21	12	23	23	23	12	12	Germany, France, Switzerland, Greece, Ireland, Italy, Netherlands, Norway, Cyprus, Sweden, Belgium, Denmark, Finland, Iceland, Liechtenstein, Luxembourg
Australia	12	23	12	12	23	23	Australia
South Africa	23	23	12	12	23	23	South Africa

•

1-3. Explanation of the Touch Panel

(1) FAX Screen

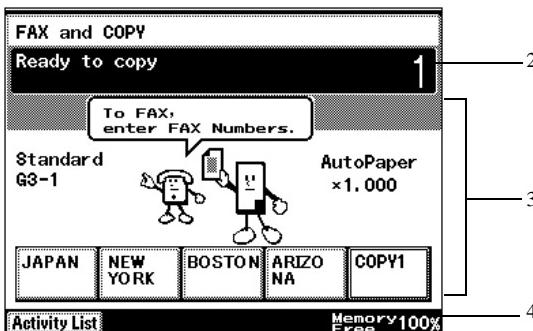
- Used to select various FAX functions.



4016P251CA

(2) Auto-mode Screen

- Used for both FAX and copying without specifying which function is to be used.



4017P345EA

1. Mode Display

- Shows the classification of the set mode.

2. Message Display

- Shows the State of FAX, instruction of operation, and message of attention and warning.

3. Function Display

- Shows the basic function keys and the corresponding functions currently selected for use.

4. Sub-message Display

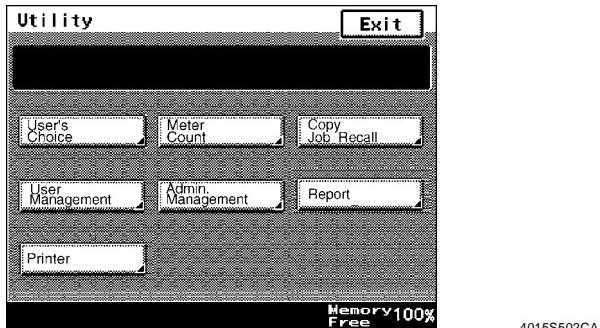
- Shows graphic representation of the operating status of a job.

2. UTILITY MODE

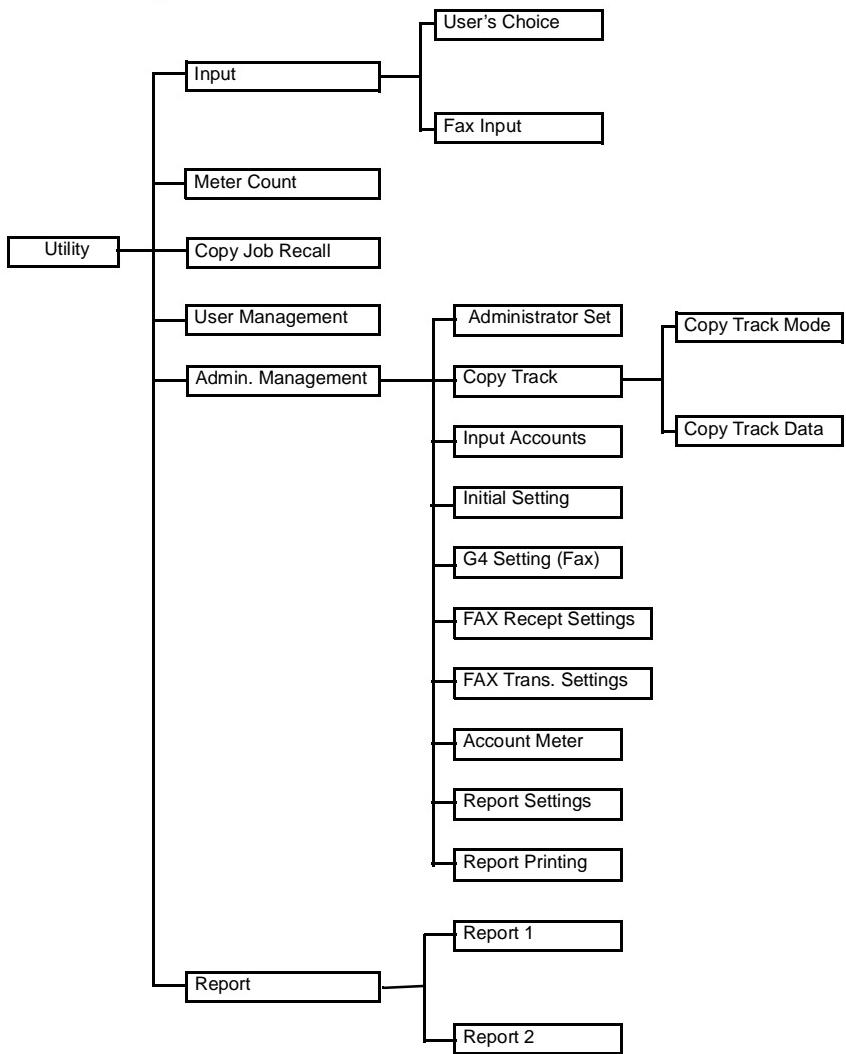
- Utility Mode is used to make various settings according to the user's need.

2-1. Utility Mode selection Screen

- Press the Utility key on the control panel.



2-2. Utility Mode Function Tree



2-3. Settings in the Utility Mode

- Only the FAX relation is described.

<Procedure>

- Press the Utility key.
- Select the appropriate function.

(1) User's Choice Mode

Utility Mode - User's Choice 1/6

Touch Panel Display	Setting (The default is Highlighted).
Date/Time Set	Set the date and time for FAX.

Utility Mode - User's Choice 3/6

Touch Panel Display	Setting (The default is Highlighted).
Sleep Mode Setting	<p>Select the time it takes the sleep function.</p> <ul style="list-style-type: none">35/25 CPM20 CPM <p>15 to 240 min. "60 min" OFF</p> <p>15 to 240 min. "30 min" OFF</p> <p>* The option of "OFF" becomes available on the screen if "Yes" is selected for "Disable Sleep Mode" of the "Admin. Management" function</p>

Utility Mode - User's Choice 5/6

Touch Panel Display	Setting (The default is Highlighted).
Output Tray	<p>Select the output tray for each application when the system is equipped with a finishing option.</p> <p><Fax></p> <ul style="list-style-type: none">Job TrayFinisher <p>1 2</p> <p>1 2 3</p> <p>* When a Finisher is mounted: Not shows copier setting.</p>

Utility Mode - User's Choice 6/6

Touch Panel Display	Setting (The default is Highlighted).
Priority Screen	Select initial screen. (after auto clear and panel reset)

Copier	FAX	Scanner	AUTO
---------------	-----	---------	------

(2) FAX Input

Utility Mode - FAX Input

Touch Panel Display	Description
Abbr. #	FAX numbers that are set for abbreviated dialing. * Up to 500 destinations can be registered. (including 300 one-touch dial keys)
One-Touch	FAX numbers that are set for one-touch dialing. * 20 one-touch dial screens, and up to 300 destinations can be registered. (15 destinations per screen × 20 screens)
Index	Index list for classifying the one-touch keys. * 20 index keys, and up to 300 destinations can be registered. (15 destinations per index × 20 index keys)
Fax Program	Program in advance the various functions that can be used for FAX transmission together with the information on a specific destination in one key. * Up to 30 FAX program keys can be used * The destinations for FAX programs must be preprogrammed in one-touch dialing or as abbreviated dialing before attempting to set up programs for them.
Relay Group	Programming the receiving station (final destination) as a relay group is convenient when this machine is used as a relay station in relay transmissions.
Self-Abbr. #	To receive this relay status report, program your abbreviated dialing number.
Bultn.	Setting are made required for setting up a bulletin board.
Account Input	The machine's initial conditions as well as the settings made as the administrator registers the account with the system can be changed according to how the machine is being used by the account. * Account input is possible only when "100 Accounts" is selected for the "Copy Track" function.

(3) User Management

Utility Mode - User Management

Touch Panel Display	Setting (The default is Highlighted).						
Line Monitor Volume	Select the volume of the line monitor. <table border="1"><tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	0	1	2	3	4	5
0	1	2	3	4	5		

(4) Input Accounts

Utility Mode - Input Accounts

Touch Panel Display	Setting (The default is Highlighted).						
Input Accounts	Administrator registers each account (a department or an individual user) with the system.						
Account 2							
Account TSI	The TSI information to be printed on any transmitted document can be programmed for each account.						
F CODE							
F CODE	Select the mailbox that can be used for an account.						
F CODE Password	The password for the mailbox is programmed.						
Remote Input Check	Select whether to use a password or not to restrict reception of documents into mailboxes from other FAX machines.						
	ON	OFF					
Func.							
Priority Screen							
Priority Screen	Select the default setting of the standby screen.						
	Copier	FAX	Scanner	AUTO			
Priority FAX Screen	Select the default screen that will appear when the "Fax/Scan" Key is pressed.						
	One-Touch	Abbr. #	10-key Dialing	Index			
Priority Scanner Screen	Select the default screen that will appear when the "Extra Scan" Key is pressed.						
	IP Scanner	One-Touch	Index				
Received Document	Select how a document received in a mailbox is to be handled.						
	Print	Forward	Prt & Forward				
	Save to Box	Move					
TX1							
Priority Quality	Select the default setting of the image quality.						
	Standard	Fine	Super Fine				
	Text + Photo	GSR	Super GSR				
Priority Contrast	Select the default setting of contrast.						
	◀	□	□	□	□	□	▶
	Lighter	Normal	Darker				
Com. Mode	Select the default setting of the communication mode.						
	G3-1	G3-2					

* Only when G3 MULTIPORT SERIES is mounted.

Utility Mode - Input Accounts

Touch Panel Display	Setting (The default is Highlighted).			
Input Accounts	Administrator registers each account (a department or an individual user) with the system.			
TX2 TSI	Select whether or not to put TSI on the transmitted document. <table border="1"><tr><td>On The Doc.</td><td>Out Of Doc.</td><td>OFF</td></tr></table>	On The Doc.	Out Of Doc.	OFF
On The Doc.	Out Of Doc.	OFF		
Output TX Report	Select the print condition for reports used to verify the results of FAX transmission. <table border="1"><tr><td>Output ON</td><td>If TX Fail</td><td>Output OFF</td></tr></table>	Output ON	If TX Fail	Output OFF
Output ON	If TX Fail	Output OFF		
Report Screen	Select whether to print on the status report a copy of the transmitted document image. <table border="1"><tr><td>ON</td><td>OFF</td></tr></table>	ON	OFF	
ON	OFF			
Max. Print Page	Limit the number of pages to be printed for each account in the rang. <table border="1"><tr><td>0 to 99999 P.</td></tr></table>	0 to 99999 P.		
0 to 99999 P.				
Initial Settings	The initial or default settings for FAX.			
ID TSI	The TSI information can be programmed when you notify name to the destination.			
Self-ID	Name and FAX number are programmed as the ID in advance.			
Self-telephone #1, 2	Telephone (FAX) number can be programmed * "Self-telephone #" is displayed only if the optional G3 MULTIPORT SERIES is not mounted.			
Line Line Type (1), (2)	Two types of telephone line. <table border="1"><tr><td>DP20</td><td>DP10</td><td>PB</td></tr></table> * "Line Type" is displayed only if the optional G3 MULTIPORT SERIES is not mounted.	DP20	DP10	PB
DP20	DP10	PB		
PSTN/Ext Switch 1, 2	Setting can be made for use of this machine over an ordinary subscriber line connected via a PBX.(private branch exchange) <table border="1"><tr><td>Extension</td><td>PSTN</td></tr></table> * "PSTN/Ext Switch" is displayed only if the optional G3 MULTIPORT SERIES is not mounted.	Extension	PSTN	
Extension	PSTN			

Utility Mode - Input Accounts

Touch Panel Display	Setting (The default is Highlighted).									
Initial Settings	<hr/>									
Func.	<hr/>									
Default Device Priority	<hr/>									
Priority FAX Screen	Select the default screen that will appear when the "Fax/Scan" Key is pressed. <table border="1"><tr><td>One-Touch</td><td>Abbr. #</td><td>10-key Dialing</td><td>Index</td></tr></table>				One-Touch	Abbr. #	10-key Dialing	Index		
One-Touch	Abbr. #	10-key Dialing	Index							
Priority Scan Screen	Select the default screen that will appear when the "Extra Scan" Key is pressed. <table border="1"><tr><td>IP Scanner</td><td>One-Touch</td><td>Index</td></tr></table>				IP Scanner	One-Touch	Index			
IP Scanner	One-Touch	Index								
Received Document	Select how a document received in a mailbox is to be handled. <table border="1"><tr><td>Print</td><td>Forward</td><td>Prt & Forward</td></tr><tr><td>Save to Box</td><td>Move</td><td></td></tr></table>				Print	Forward	Prt & Forward	Save to Box	Move	
Print	Forward	Prt & Forward								
Save to Box	Move									
Com. Password	The communication password required for carrying out password communications.									
Manage	<hr/>									
Incomplete TX Hold	Documents that could not be sent can be saved in memory. <table border="1"><tr><td>10 M to 72 H</td><td>"1 HR"</td><td>Not Held</td></tr></table> * It is also possible to select not to retain documents.("Not Held")				10 M to 72 H	"1 HR"	Not Held			
10 M to 72 H	"1 HR"	Not Held								

Utility Mode - Input Accounts

Touch Panel Display	Setting (The default is Highlighted).		
FAX Recept Settings	Set the various FAX reception functions.		
RX1	Reception mode for the FAX machine can be selected. <table border="1"><tr><td>Auto</td><td>Manual</td></tr></table>	Auto	Manual
Auto	Manual		
No. of RX Call Rings The number or times the telephone rings before automatic reception is activated can be set. <table border="1"><tr><td>1 to 9</td><td>"1 T."</td></tr></table> * Displayed only if the optional G3 MULTIPORT SERIES is not mounted.	1 to 9	"1 T."	
1 to 9	"1 T."		
RX2	Select the mailbox that can be used for F CODE specification by PB tone. <table border="1"><tr><td>ON</td><td>OFF</td></tr></table>	ON	OFF
ON	OFF		
Second Dial			
RX3	Select whether to use the password reception. <table border="1"><tr><td>ON</td><td>OFF</td></tr></table>	ON	OFF
ON	OFF		
RX Time Stamp G3 Select whether or not to print the reception time/date on the received document. <table border="1"><tr><td>On The Doc.</td><td>Out Of Doc.</td><td>OFF</td></tr></table>	On The Doc.	Out Of Doc.	OFF
On The Doc.	Out Of Doc.	OFF	
E-mail Select whether or not to print the reception time/date on the received document. <table border="1"><tr><td>On The Doc.</td><td>Out Of Doc.</td><td>OFF</td></tr></table>	On The Doc.	Out Of Doc.	OFF
On The Doc.	Out Of Doc.	OFF	
Long Doc	Setting can be made whether to reduce or cut off a document received that is longer than the size of the print paper. <table border="1"><tr><td>Reduction</td><td>Cut Off</td></tr></table>	Reduction	Cut Off
Reduction	Cut Off		
Reduction The reduction ratio can be selected. <table border="1"><tr><td>60 to 100</td><td>"65 %"</td></tr></table> * Only if "Reduction" has been selected for how to handle long documents.	60 to 100	"65 %"	
60 to 100	"65 %"		
Cut Off Length The cut-off length can be selected. <table border="1"><tr><td>0 to 24</td><td>"20 mm"</td></tr></table> * Only if "Cut Off" has been selected for how to handle long documents.	0 to 24	"20 mm"	
0 to 24	"20 mm"		

Utility Mode - Input Accounts

Touch Panel Display	Setting (The default is Highlighted).
FAX Recept Settings	Set the various FAX reception functions.
Paper1	
If no paper matching up to TX Doc. size?	Selecting another paper when the <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <input checked="" type="button" value="Paper Priority"/> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <input type="button" value="Cassette Priority"/> </div>
Print Paper Select	Choose how to select the paper size when a FAX is received. <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <input checked="" type="button" value="Standard"/> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <input type="button" value="Width Priority"/> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <input type="button" value="Constant Width Mode"/> </div>
Unselectable Cassette	Designate a paper source to be excluded from the possible choices, when the machine is set to select an appropriate paper source automatically.
Paper2	
2in1 Receive	Selection can be made whether to use 2in1 reception. <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <input checked="" type="button" value="ON"/> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <input type="button" value="OFF"/> </div>
Rotation Print	Select whether to use rotation print, and if used whether the document is to be sorted. <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <input type="button" value="Sort ON"/> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <input checked="" type="button" value="OFF"/> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <input type="button" value="Rotation OFF"/> </div>

Utility Mode - Input Accounts

Touch Panel Display	Setting (The default is Highlighted).								
FAX Trans. Settings	Set the various FAX transmission functions.								
TX Set 1									
Priority Quality	Select the default setting of the image quality.								
	<table border="1"> <tr> <td>Standard</td> <td>Fine</td> <td>Super Fine</td> </tr> <tr> <td>Text + Photo</td> <td>GSR</td> <td>Super GSR</td> </tr> </table>			Standard	Fine	Super Fine	Text + Photo	GSR	Super GSR
Standard	Fine	Super Fine							
Text + Photo	GSR	Super GSR							
Priority Contrast	Select the default setting of contrast.								
	<table border="1"> <tr> <td>Lighter</td> <td>Normal</td> <td>Darker</td> </tr> </table>			Lighter	Normal	Darker			
Lighter	Normal	Darker							
Com. Mode	Select the default setting of the communication mode.								
	<table border="1"> <tr> <td>G3-1</td> <td>G3-2</td> </tr> </table>			G3-1	G3-2				
G3-1	G3-2								
	* Only when G3 MULTIPORT SERIES is mounted.								
TX Set 2									
TX	Select the default setting of the transmission method.								
	<table border="1"> <tr> <td>Memory TX</td> <td>Real-Time</td> </tr> </table>			Memory TX	Real-Time				
Memory TX	Real-Time								
TSI	Select whether to put TSI on the transmitted document.								
	<table border="1"> <tr> <td>On The Doc.</td> <td>Out Of Doc.</td> <td>OFF</td> </tr> </table>			On The Doc.	Out Of Doc.	OFF			
On The Doc.	Out Of Doc.	OFF							
Password TX	Select whether to use password transmission.								
	<table border="1"> <tr> <td>ON</td> <td>OFF</td> </tr> </table>			ON	OFF				
ON	OFF								
TX Marker	Select whether to use TX Marker.								
	<table border="1"> <tr> <td>Bottom</td> <td>Top & Bottom</td> <td>OFF</td> </tr> </table>			Bottom	Top & Bottom	OFF			
Bottom	Top & Bottom	OFF							
	* Only when TX Marker Stamp Unit is mounted on the ADF.								
E-mail Sender's Name	Select whether to put E-mail sender's name on the transmitted document.								
	<table border="1"> <tr> <td>Same as TSI</td> <td>OFF</td> </tr> </table>			Same as TSI	OFF				
Same as TSI	OFF								
TX Set 3									
Relay-Station Print	Select whether to print a document when relay transmission is performed.								
	<table border="1"> <tr> <td>ON</td> <td>OFF</td> </tr> </table>			ON	OFF				
ON	OFF								
Line Selection	Choose whether to Select the line.								
	<table border="1"> <tr> <td>Auto</td> <td>Select</td> </tr> </table>			Auto	Select				
Auto	Select								
	* Only when G3 MULTIPORT SERIES is not mounted.								

Utility Mode - Input Accounts

Touch Panel Display	Setting (The default is Highlighted).
Account Meter	Machine utilization status (number of pages printed, number of pages transmitted) can be checked on the screen for each account.
Report Setting	Set the various FAX concerning reports.
TX Report	Select the print condition for reports used to verify the results of FAX transmission. <input type="button" value="Output ON"/> <input checked="" type="button" value="If TX Fail"/> <input type="button" value="Output OFF"/>
Activity Report	Select whether to automatically print the activity report even 50 communications. <input type="button" value="Output ON"/> <input type="button" value="Output OFF"/>
Report Screen	Select whether to print on the status report a copy of the transmitted document image. <input checked="" type="button" value="ON"/> <input type="button" value="OFF"/>
Memory Clear Report	Select whether to print a report to show that some documents have been cleared due to a power failure or other reason. <input type="button" value="Output ON"/> <input type="button" value="Output OFF"/>
Report Printing	Print and check the various kinds of account information for each account.
Account Count Report	The tally data for each account, including the number of pages printed and transmitted, can be printed. <small>* This function is available only when "100 Accounts 1" or "100 Accounts 2" is selected for "Copy Track".</small>
Setting List	The information on the settings made for this machine can be printed.
Account List	The various kinds of account for each account, including the account name and specific settings made for communication, can be printed.

(5) Report

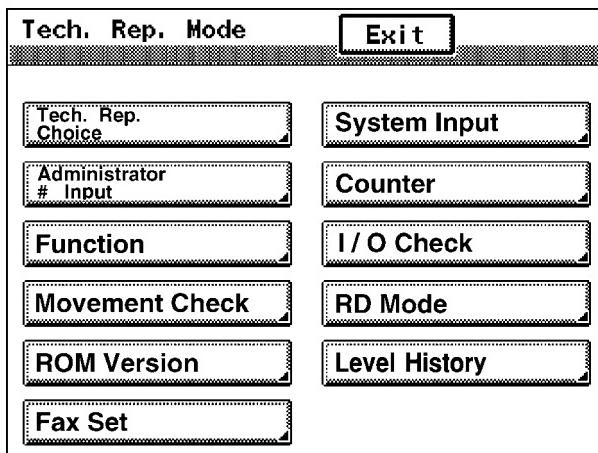
Utility Mode - Report

Touch Panel Display	Description
Report 1	
TX Act. Report	Used to check the document number, time sent, duration, destination, communications mode, number of pages transmitted and result, etc.
RX Act. Report	Used to check the document number, time received, duration, destination, communications mode, number of pages printed and result, etc.
Bulletin Board List	The list of documents registered on the bulletin board can be printed as a report.
Report 2	
One-Touch List	The destinations registered in the one-touch keys can be printed out on a list in key number order for confirmation.
Abbr. # List	The destinations registered as abbreviated dialing can be printed out on a list in numerical order for confirmation.
Fax Program List	Details of communications settings (FAX programs) registered in one-touch programs can be printed as a report.
Relay Group List	Group details registered for relay broadcast transmission can be printed as a report.

3. TECH. REP. MODE

- This mode is used by the Tech. Rep. to check, set, adjust, and/or program various service functions.

3-1. Tech. Rep. Mode Menu Screen



4015S503CA

3-2. Tech. Rep. Mode Function Setting Procedure

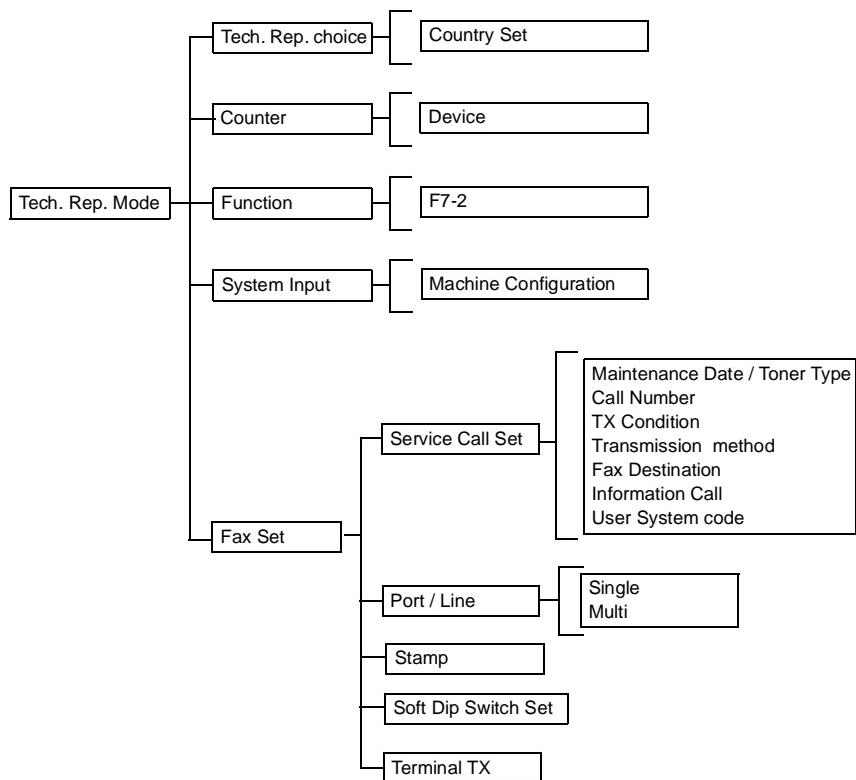
<Procedure>

1. Press the Utility key.
2. Press the Meter Count key.
3. Press the following keys in this order:
Stop → 0 → 0 → Stop → 0 → 1
4. Select the desired Tech. Rep. Mode function.

<Exiting the Mode>

- Touch the "Exit" key.

3-3. Tech. Rep. Mode Menu Function Tree



(1) Tech. Rep.choice

- This function allows the Tech. Rep. to make marketing area setting.
- If change the country ser. Soft switch will change automatically.

Tech. Rep. Mode - Tech. Rep.choice

Touch Panel Display	Setting (The default is Highlighted).				
Country Set	Select whether to use marketing area.				
	Germany	France	U.K.	Italy	Austria
	Swiss	Belgium	Holland	Spain	Portugal
	Denmark	Norway	Sweden	Finland	Czech
	Hungary	Poland			

(2) Counter

- Shows the number of FAX made on each paper size or type.

<Clearing a Count>

1. Open the counter menu screen.
2. Select the counter to be cleared.
3. Press the Clear key.
4. Touch "END".

Press the Interrupt key to undo the clearing operation, restoring the original count.

<Clearing All Counts of a Counter Type at Once>

1. Touch the "Counter Reset" key.
2. Select the counters to be cleared all at once.
3. Touch "OK"

Tech. Rep. Mode - Counter

Touch Panel Display	Description	
Device	Shows the numbers of prints for different applications. It also allows the Tech. Rep. to clear each counter.	
	Display	Description
	Copier	No. of prints made by copier
	Printer	No. of prints made by printer
	Report Print	No. of report prints made
	FAX Print	No. of fax prints made
	FAX Transmission	No. of prints made for fax transmission
	Mail Transmission	No. of prints made for mail transmission

(3) Function

- This function allows the Tech. Rep. to make the various function tests and adjustments.

Tech. Rep. Mode - Function

Touch Panel Display	Description
F7-2	<p><Original Size Detecting Sensor Adjustment for FAX Mode> Automatically adjusts the threshold level of the Original Size Detecting Sensor.</p> <p><Adjustment Procedure></p> <ol style="list-style-type: none">1. Stack five sheets of blank A3 or 11×17 paper on the Original Glass and lower the Original Cover.2. Call the Tech. Rep. Mode to the screen.3. Touch "Function" to display the Function menu.4. Touch "F7-2".5. Press the Start key to run the Original Size Detecting Sensor Adjustment function.6. Turn OFF and ON the Power Switch. <p>NOTE</p> <ul style="list-style-type: none">• <i>The Start key remains lit up orange while this function is being run and lights up green as soon as the sequence is completed.</i>

(4) System Input

- The function allows the Tech. Rep. to define the paper size input, and make settings.

Tech. Rep. Mode - System Input

Touch Panel Display	Description
Machine Configuration	Displays the machine configuration status.

<How to confirm the add-on memory capacity>

- When you add a memory card, ROT (8 MB or 16 MB), the system indicates "8.3 MB" of the rotary memory.
- If you add a ROT with the rotational memory of 8.3 MB, the image memory capacity is increased by 8 MB or 16MB and the system indicates "8 MB" or "16 MB", respectively.
- If you add a TMEM, the image memory of 32 MB is added and the system indicates "32 MB".
- If you add a ENU, the work memory of 12 MB is added and the system indicates "16 MB".

(5) Fax Set

- The function allows the Fax settings.

Tech. Rep. Mode - Fax Set

Touch Panel Display	Setting (The default is Highlighted).			
Service Call Set	When the pre-set condition of the system occurs, the system informs its status to the call center automatically.			
Maintenance Date/ Toner Type	Select "Year", "Month", and "Day" on the screen of the maintenance date to specify the date for maintenance Select whether to use toner type. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">5 K</td> <td style="text-align: center;">10 K</td> </tr> </table>	5 K	10 K	
5 K	10 K			
Call Number	<ul style="list-style-type: none"> Procedure <ol style="list-style-type: none"> Select "Com. Mode" on the screen of the call number to specify the communication mode. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">G3 - 1</td> <td style="text-align: center;">G3 - 2</td> <td style="text-align: center;">Mail</td> </tr> </table> <ol style="list-style-type: none"> Enter "TEL#" on the screen of the call number to specify the phone number 	G3 - 1	G3 - 2	Mail
G3 - 1	G3 - 2	Mail		
TX Condition	Set of the transmission condition.			
No. of Print	Service call for exceeding specified number of papers. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">ON</td> <td style="text-align: center;">OFF</td> </tr> </table> <p>* Input exceeding specified number of paper, when is selected for "ON"</p>	ON	OFF	
ON	OFF			
Toner Empty	Service call for empty toner. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">ON</td> <td style="text-align: center;">OFF</td> </tr> </table>	ON	OFF	
ON	OFF			
Drum Life	Service call for reaching life cycle of drum. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">ON</td> <td style="text-align: center;">OFF</td> </tr> </table>	ON	OFF	
ON	OFF			
Malfunction	Service call for <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">ON</td> <td style="text-align: center;">OFF</td> </tr> </table>	ON	OFF	
ON	OFF			
Transmission Method	Select whether to use transmission method. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">Report</td> <td style="text-align: center;">Data</td> <td style="text-align: center;">E-mail</td> </tr> </table>	Report	Data	E-mail
Report	Data	E-mail		
Fax Destination	Enters the Fax number on a report when a notification to the call center fails.			
Information call	Enters the information call number on a report when a notification to the call center fails.			
User System Code	Enters the memo			

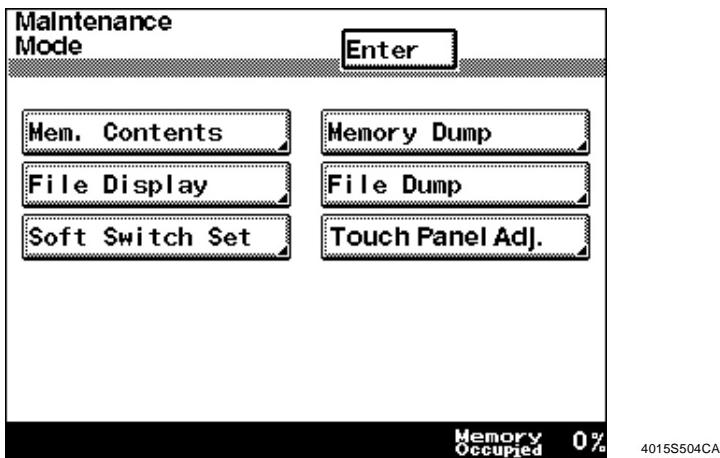
Tech. Rep. Mode - Fax Set

Touch Panel Display	Setting (The default is Highlighted).							
Port/Line								
Port	Setting per port type. <table border="1"> <thead> <tr> <th>Display</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Single</td> <td>G3 type system</td> </tr> <tr> <td>Multi</td> <td>If the system has G3 Multi-Pore Option</td> </tr> </tbody> </table>		Display	Description	Single	G3 type system	Multi	If the system has G3 Multi-Pore Option
Display	Description							
Single	G3 type system							
Multi	If the system has G3 Multi-Pore Option							
Line	Setting per line type. <ul style="list-style-type: none"> Single: PSTN1 Multi : PSTN1 or PSTN2 							
Stamp	Used to indicate when the TX marker option is installed. <table border="1"> <tr> <td>ON</td> <td>OFF</td> </tr> </table>		ON	OFF				
ON	OFF							
Soft Switch Set	<p>This sets up the soft switches for maintenance.</p> <ul style="list-style-type: none"> Procedure <ol style="list-style-type: none"> Touch "Mode Selection". Type the value for a mode of the soft switch and then touch "Enter". Touch "Bit Selection" or "HEX Selection". Type the value of the soft switch with the 10-key pad and then touch "Enter". Use <0> and <1> of the 10-key pad to type bit values. For hex numbers, use 0-9, A, B, C, D, E, and F. The last "Enter" returns to the screen of the maintenance menu. 							
Terminal TX	<p>You can receive data on the one touch dial or send the data stored in the system to the call center.</p> <ul style="list-style-type: none"> Procedure <ol style="list-style-type: none"> Enter "Function ID Code" and "Extended ID Code" on the screen of the terminal transmission and touch "Execute". Start remote diagnostics on the screen of the remote diagnostics. <p>When the service call is in the data transmission mode, the same call number will be used to make a terminal transmission to the call center.</p> <p>* The service call is in the fax transmission mode, you need to switch it to the data transmission mode and also change the call number. Always restore the service call setup after you complete a terminal transmission.</p> 							

4. Maintenance Mode

- This mode is used by the displays data and print a report.

4-1. Maintenance Mode Menu Screen



4-2. Maintenance Mode Function Setting Procedure

<Procedure>

1. Press the Utility key.
2. Press the Meter Count key.
3. Press the following keys in this order:
Stop → 0 → 0 → Stop → 0 → 2
4. Select the desired Maintenance Mode function.

<Exiting the Mode>

- Touch the "Exit" key.

4-3. Settings in the Maintenance Mode

(1) Maintenance Mode

- This mode displays data on screen and reports. It is possible to carry out routine operations.

Maintenance Mode

Touch Panel Display	Description
Mem. Contents	<p>This displays the RAM data of MAIN-CPU on the LCD by specifying its absolute address which will be provided by our technical department.</p> <ul style="list-style-type: none">• Procedure1. Press the Warm Restart switch.2. Enter the Maintenance Mode.3. Touch “Mem. Contents”.4. Input the address with the 10-key pad or the touch keys and then touch “Enter”. It should be typed in the HEX code (0-9, A, B, C, D, E, F)5. Touch “↑” or “↓” to change the address.6. Touch “Enter” twice to return to the maintenance mode.
Memory Dump	<p>This outputs a report on the RAM data of MAIN-CPU by specifying its absolute address which will be provided by our technical department.</p> <ul style="list-style-type: none">• Procedure1. Press the Warm Restart switch.2. Enter the Maintenance Mode.3. Touch “Memory Dump”.4. Input the address with the 10-key pad or the touch keys and then touch “Enter”. It should be typed in the HEX code (0-9, A, B, C, D, E, F)5. Touch “Length”.6. Input the length with the 10-key pad or the touch keys and then touch “Enter”. It should be typed in the HEX code (0-9, A, B, C, D, E, F).7. Touch “Enter” to return to the standby mode.
File Display	<p>This displays the RAM data of MAIN-CPU on the LCD by specifying its file name.</p> <ul style="list-style-type: none">• Procedure1. Press the Warm Restart switch.2. Enter the Maintenance Mode.3. Touch “File Display”.4. Type the file name and then touch [Enter]. It should be typed in the alphanumeric code (0-9, A-Z). (For typing the file name, refer to the input method of the destination of one-touch dialing.)5. Touch [↑] or [↓] to change the displayed address. (↓ : beginning display address + 30H.)6. Touch [Enter] to return to the maintenance mode.

Maintenance Mode

Touch Panel Display	Description
File Dump	<p>This outputs a report on the RAM data of MAIN-CPU by specifying its file name.</p> <ul style="list-style-type: none"> • Procedure <ol style="list-style-type: none"> 1. Press the Warm Restart switch. 2. Enter the Maintenance Mode. 3. Touch "File Dump". 4. Type the file name and then touch "Enter". It should be typed in the alphanumeric code (0-9, A-Z). (For typing the file name, refer the input method of the destination of one-touch dialing.) 5. File dumping will be started and returns to the standby mode.
Soft Switch set	☞ See "Soft Switch Set" on page S-21.
Touch Panel Adj.	<p>This mode is adjust the position of the touch panel.</p> <ul style="list-style-type: none"> • Procedure <ol style="list-style-type: none"> 1. Enter the Maintenance Mode. 2. Touch "Touch Panel Adj". 3. Touch "+" at the upper left corner. Touch the next "+" following the arrow symbol on screen in a clockwise direction. Repeat this step for all 4 corners. Push the center of each "+" with a fine soft felt pen. 4. The touch panel returns the maintenance mode.

(2) Report

- This report can be output only in the Maintenance Mode.

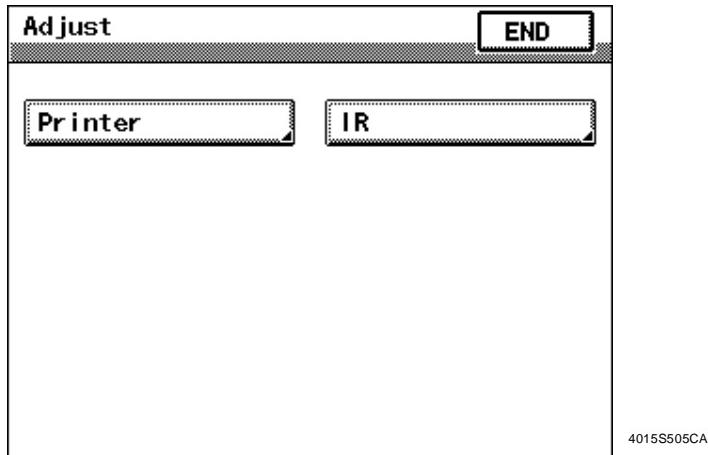
Utility Mode - Report

Touch Panel Display	Description
Report 1	_____
Protocol Trace	Each communication processes information on a protocol trace.
Service Call Report	Service Call Report is output with the manually.

5. ADJUST MODE

- Used at the factory for making adjustments.

5-1. Adjust Mode Menu Screen



5-2. Adjust Mode Setting Procedure

<Procedure>

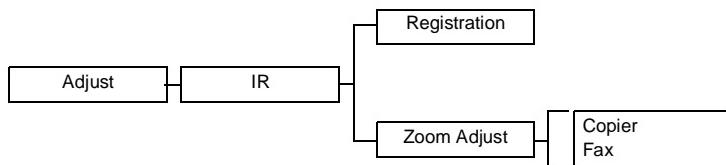
- Show the Tech. Rep. mode menu screen.
- Press the following keys in this order:
Stop → Start
- Select the desired function.
* Use the Access Mode key to enter a + or - sign.

<Exiting the Mode>

- Touch the "END" key.

5-3. Adjust Mode Function Tree

Only FAX adjust



5-4. Settings in the Adjust Mode

(1) IR

- Adjust functions relating to the I.R.

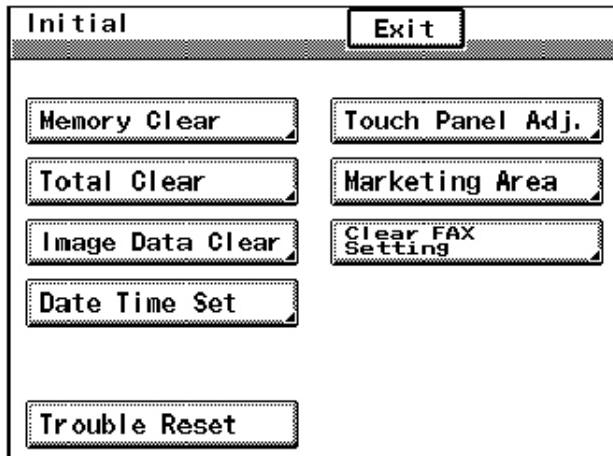
Adjust Mode - IR

Touch Panel Display	Setting
Registration (FAX)	<p>Adjust registration in the CD and FD direction on the IR side.</p> <p>Main scanning (CD)</p> <p>-72 dot..... 0.....+72 dot</p> <p>Smaller ← → Greater</p> <p>Sub scanning (FD)</p> <p>-24 dot..... 0.....+127 dot</p> <p>Smaller ← → Greater</p>
Zoom Adjust (FAX)	<p>Adjust the zoom ratio in the CD and FD direction on the IR side.</p> <p>0.990 1.000 1.010</p> <p>Smaller ← → Greater</p>

6. INITIAL MODE

- Used to initialize the various FAX functions.

6-1. Initial Mode Menu Screen



6-2. Initial Mode Setting Procedure

<Procedure>

- Press the Warm Restart switch. Then “.” appears at the center on the left side of the screen.
- Enter “3” from the 10-Key Pad.
- Select the desired function.

<Exiting the Mode>

- Touch the “Exit” key.

6-3. Settings in the Initial Mode

Initial Mode - FAX Set Clear

Touch Panel Display	Setting (The default is Highlighted).								
FAX Set Clear	Clears the FAX-related settings. <table border="1"><tr><td>Own Setting</td><td rowspan="4">Yes</td><td rowspan="4">No</td></tr><tr><td>Destination</td></tr><tr><td>Activity</td></tr><tr><td>Soft Switch</td></tr></table>			Own Setting	Yes	No	Destination	Activity	Soft Switch
Own Setting	Yes	No							
Destination									
Activity									
Soft Switch									

• Procedure

- Touch the FAX-related set item to be cleared (the item will be highlighted) and touch “END”.
- Select “Yes” or “No”. (It does not clear data, touch “No”.)
- Touch “Enter”, then selected data will be reset.

7. SOFT SWITCH LIST

7-1. List of Defaults

Note

- * in the remark indicates a mode that has items opened to users.
 - Default switch is DTS correspondence at Germany.
-

MODE	Default	Remark	*
000	30	TX Marker, TSI, Password, Memory TX	*
001	14	FAX quality, Density	*
002	AB	Report	*
003	23	Line monitor, Forward RX (PSTN1)	*
004	16	# of ringers, Memory time	*
005	20	# of redialing	*
006	32	DP speed, PB switch, Estimated connection time (PSTN1)	*
007	B5	Print range	*
008	00	Select print paper	*
009	1A	Communication mode	*
010	00	(Undefined)	
011	30	DP speed, PBX switch, Estimated connection time (PSTN2)	*
012	C0	Screen: display illustration, #, Input default cassette size at Power source on	
013	**	Auto-mode screen, INBOX 29: Initial value for 25-cpm Copier 31: Initial value for 35-cpm Copier	
014	00	Redialing interval	
015	00	(Undefined)	
016	00	Print date & time received, Position of Print date & time received	
017	00	(Undefined)	
018	01	Destination displaying screen	*
019	00	(Undefined)	
020	40	Display report, Display trace protocol, Display error codes	
021	00	Display symbol rate, Observe EQM, Observe probing information	
022	02	FAX memory nearly full capacity, Restrict parameters of memory stored TX	
023	F8	Set margins for report image	*
024	81	Display forward function button, Alarm buzzer pattern, Receiving by other users	
025	7F	Various service calls	
026	DE	Service call, Remote maintenance	
027	24	Display ID, Display button, Secured comm., F code	*
028	63	Remote copy protocol, # of remote multi-copies	
029	00	(Undefined)	
030	30	Rotate print, 2in1, Restrict print paper selection, Assign mixed mm/inch papers	*

MODE	Default	Remark
031	81	Margins for multi-sheet report image margin, Margins for output format of report image, Reprint
032	61	Detect short doc. jamming, FAX photo/text mixed mode, Select metric/inch
033	14	Draft printing mode and level
034	02	Cut print paper leading edge, Overlapped printing, Long document
035	03	RX by memory
036	00	RX print order
037	F8	Select FAX paper cassette *
038	00	Turn on print lamp for out-of print paper
039	00	(Undefined)
040	FA	2-dim coding, T.6 coding,JBIG, V34JBIG
041	40	ECM mode
042	3F	Redialing interval
043	80	# of resending doc., Redialing non-answered call, Auto-answering call, TCI/CSI registration screen
044	**	RTN sending error, TCF sending, T1 timer, T4 timer A0: Initial value for Non DTS 80: Initial value for DTS
045	00	(Undefined)
046	00	(Undefined)
047	88	V34 fallback tolerance
048	C6	Set up MODEM standard, Allow V.34 and V.8
049	0D	Transmission speed upper limit (TX)
050	0D	Transmission speed upper limit (RX)
051	20	Declare RX print paper size
052	00	Relay Transmission (restricted/unrestricted)
053	C0	F code RX error
054	0A	History control of V.34 auto dialing, Demodulation method
055	00	RX level is set
056	44	F code function (PB), Sending time of ANsm
057	**	(Undefined)
	**	(Undefined)
079	**	(Undefined)

MODE	Default	Remark
080	6E	Line connection (PSTN1)
081	00	(Undefined)
082	2C	Busy tone, Line disconnection (PSTN1)
083	00	(Undefined)
084	10	PB sending lever, PB detection method (PSTN1)
085	70	TX level (PSTN1)
086	40	RX attenuator (PSTN1)
087	90	Detect continuous ringer, Ringer detection frequency (PSTN1)
088	40	Process detection time out of 2nd dial tone, 1300 Hz detection (PSTN1)
089	00	TX method, Prefix # (PSTN1) *
090	00	(Undefined)
091	00	(Undefined)
092	70	Sending echo protection tone, switch carrier frequency (PSTN1)
093	40	CED, Receive command echo, Control channel date rate
094	0C	AGC lock (PSTN1)
095	20	Digital TX/RX cable equalizer (PSTN1)
096	14	CI signal sending time (PSTN1)
097	14	TCF/NTCF sending level down, V17/V33/V29 sending level down, V.34 symbol rate (PSTN1)
098	46	Initial time of sending CM signal, EQM threshold value (PSTN1)
099	88	Symbol speed threshold value (PSTN1)
100	**	(Undefined)
	**	(Undefined)
109	**	(Undefined)
110	23	Line connection (PSTN2)
111	00	(Undefined)
112	28	Busy tone, Line disconnecting (PSTN2)
113	00	(Undefined)
114	10	PB sending lever, PB detection method (PSTN2)
115	70	TX level (PSTN2)
116	40	RX attenuator (PSTN2)
117	90	Detect continuous ringer, Ringer detection frequency (PSTN2)
118	40	Process detection time out of 2nd dial tone, 1300 Hz detection (PSTN2)
119	00	TX method, Prefix # (PSTN2) *
120	00	(Undefined)

MODE	Default	Remark
121	00	(Undefined)
122	70	Sending echo protection tone, switch carrier frequency (PSTN2)
123	48	CED, Receive command echo, Control channel date rate
124	0C	AGC lock (PSTN2)
125	20	Digital TX/RX cable equalizer (PSTN2)
126	14	CI signal sending time (PSTN2)
127	14	TCF/NTCF sending level down, V17/V33/V29 sending level down, V.34 symbol rate (PSTN2)
128	46	Initial time of sending CM signal, EQM threshold value (PSTN2)
129	88	Symbol speed threshold value (PSTN1)
130	**	(Undefined)
	**	(Undefined)
189	**	(Undefined)
190	00	Restrict SF/SSF comm
191	00	(Undefined)
192	C0	Order of displaying year to date
193	**	(Undefined)
	**	(Undefined)
196	**	(Undefined)
197	C0	Summer time, Display summer time button, Summer time pattern
198	**	(Undefined)
	**	(Undefined)
209	**	(Undefined)
210	05	DP steady current time 1 (PSTN1)
211	0C	DP steady current time 2 (PSTN1)
212	00	DP make rate (PSTN1)
213	**	(Undefined)
	**	(Undefined)
229	**	(Undefined)
230	05	DP steady current time 1 (PSTN2)
231	02	DP steady current time 2 (PSTN2)
232	00	DP make rate (PSTN2)
233	**	(Undefined)
	**	(Undefined)
399	**	(Undefined)

Mode	HEX	Remark
400	00	Memory Recall, Mixed Original Detection
401	04	Language Selected
402	01	Simplex/Duplex, Original ► Copy Default, Auto Paper/Auto Size, Main Application, Priority Application Specification *
403	01	Multiple-in-1 and Booklet Copy Zoom, Plug-In Counter, ID Key Reset
404	01	Auto Panel Reset
405	0F	Energy Save Mode
406	3C	Auto Power Off
407	01	LCD Back-light Off
408	00	Drawer Priority
409	08	4in1 Copy Order, Density Priority, Original Image Type *
410	44	Default Copy Output Levels, Density (ADF only), Default Copy Output Levels
411	00	Code Bit, Priority Density (copy) *
412	08	Priority Sort Mode, Priority Stapling Mode, Priority Punch Mode, Intelligent Sorting (copy) *
413	14	FAX (Mail) Output Bin Specification, PC Print Output Bin Specification, PC Print Output Bin Specification, Copy Output Bin Specification, FAX (Mail) Output Bin Specification *
414	A0	Image Compression When Reserving Capacity In The Copy Memory (copy)
415	6C	Beep Volume, Alarm Volume *
416	60	Sound Volume Setting 3 Monitor Tone, Orientation Of Images When Finisher Is Connected, Overseas Scanner File Format, Disable Auto Shut Off (copy) *
417	63	Max Copy Sets, Set Copy Quantity Limit (copy)
418	78	Edge Erase, I/C Life Stop Specification, I/C Near-End-Of-Life Display Setting
419	00	(Undefined)
420	00	(Undefined)
421	40	Destination code (copy)
422	08	Total Counter, Size Counter, Copy Kit Counter
423	48	Plug-In Counter, Key Counter, Vender Mode, Original Size Detecting Option
424	18	Auto Paper configuration, FLS Paper, Copy Mode Limit (copy), "Small" Originals, Function Limit, Non-standard size original processing when ADFR and A4/Letter paper are selected (copy)
425	00	Image Quality Mode Adjustment (copy)
426	00	(Undefined)
427	**	Default Setting Country Classification (copy) **: Differs according to the set country.
428	00	(Undefined)
429	00	(Undefined)
430	78	Overseas Scanner Timeout Time *
431	**	(Undefined)
	**	(Undefined)
799	**	(Undefined)

7-2. List of Soft Switches

The tables below describe the soft switches of this system.

The highlighted areas are the initial settings.

Note

- The mark (*) indicates a mode containing items that can be set according to the user's choice, for example.
- The feature with [**] (bit 1) is available only in a system with a multi-port option.

MODE 000	Factory setting bit : 0 0 1 1 0 0 0 0 (Hex : 30)
----------	--------------------------------------------------

Bit	Feature	Logic	Meaning	Description
7	Stamping default of TX mark. *	0 1	OFF Yes	Specifies whether TX marker is returned to ON or OFF after completing operations.
6	Select position of TX marker. *	0 1	Leading & trailing edges of doc. Only trailing edge of doc.	
5	Default addition of TSI. *	0 1	No Yes	Specifies whether printing TSI on transmitted document is returned to ON or OFF after completing operations.
4	Select position of TSI. *	0 1	Outside doc. Inside doc.	
3	Specifies default confirming group password. *	0 1	No Yes	Specifies whether confirming group password at TX is returned to ON or OFF after completing operations.
2	Confirm group password at RX. *	0 1	No Yes	
1	Transmission form default *	0 1	Memory-stored Non-stored	Specifies which TX method is returned to ON, memory-stored TX or nonstorage TX after completing operations.
0	E-mail sender's name. *	0 1	Same as TSI No	

MODE 001 | Factory setting bit : 0 0 0 1 0 1 0 0 (Hex : 14)

Bit	Feature	Logic	Meaning	Description
7654	Default of image quality.	*	0000 0001 Standard 0010 0011 0100 0101 0110 0111 1000 Others	Not available Standard Fine Not available Superfine GSR Not available Super GSR Text + photo Not available
321	Default of density when communication.	*	000 001 010 Normal 011 100 Others	Much lighter Lighter Normal Darker Much darker Not available
0			0	Fixed to "0"

MODE 002 | Factory setting bit : 1 0 1 0 1 0 1 1 (Hex : AB)

Bit	Feature	Logic	Meaning	Description
7	Print communication activity report automatically.	*	0 1 Yes	No Yes Report automatically for every 50 activities. "No" means manual print.
65	Select when a result report should be printed.	*	00 01 Print for incomplete TX 10 11	No print Print for incomplete TX Always print Not available
4			0	Fixed to "0"
3	Print memory clear report.	*	0 1 Yes	No Yes
2			0	Fixed to "0"
1	Print relay result report.		0 1 Yes	No Yes
0	Select relay-station print at relay TX.	*	0 1 Yes	No Yes

MODE 003 | Factory setting bit : 0 0 1 0 0 0 1 1 (Hex : 23)

Bit	Feature	Logic	Meaning	Description
76		00	Fixed to "00"	
5	Monitor line. (PSTN1) *	0	No	
		1	Yes	
4	Forwarding reception. (PSTN1) *	0	No	
		1	Yes	
3210	Forwarding reception dial number. (PSTN1)	0000 0001 0010 0011 0100 0101 0110 0111 1000 1001 Others	0 1 2 3 4 5 6 7 8 9 Not available	

MODE 004 | Factory setting bit : 0 0 0 1 0 1 1 0 (Hex : 16)

Bit	Feature	Logic	Meaning	Description
7654	Select # of rings for automatic reception.*	0000	Not available	Specifies number of rings (calling beeps) before the system starts answering an incoming call.
		0001	1	
		0010	2	
		0011	3	
		0100	4	
		0101	5	
		0110	6	
		0111	7	
		1000	8	
		1001	9	
		Others	Not available	
3210	Selects holding time of uncompleted TX document in memory.*	0000	0	IC memory device Delete file from memory immediately (No redialing function.)
		0001	10 min	
		0010	20 min	
		0011	30 min	
		0100	40 min	
		0101	50 min	
		0110	1 hr	
		0111	2 hr	
		1000	4 hr	
		1001	8 hr	
		1010	12 hr	
		1011	24 hr	
		1100	72 hr	
		Others	Not available	

Bit	Feature	Logic	Meaning	Description
7654	Select number of redialing 1. (Number of auto redialing at 1st stage)	0000	0	Specifies the number of redialing with the interval specified by "Select redialing interval 1 (MODE 042 Bit 7-4)."
		0001	1	
		0010	2	
		0011	3	
		0100	4	
		0101	5	
		0110	6	
		0111	7	
		1000	8	
		1001	9	
		1010	10	
		1011	11	
		1100	12	
		1101	13	
		1110	14	
		1111	15	
3210	Select number of redialing 2. (Number of auto redialing at the 2nd stage)	0000	0	Once redialing set by "Select number of redialing 1 (MODE 005 Bit 7-4)", the system redials the number of times specified by this soft switch.
		0001	1	
		0010	2	
		0011	3	
		0100	4	
		0101	5	
		0110	6	
		0111	7	
		1000	8	
		1001	9	
		1010	10	
		1011	11	
		1100	12	
		1101	13	
		1110	14	
		1111	15	

Note

- If the first stage sets [0000], the system proceeds to the second stage without the first stage after 10 minutes.
- If the first and second stages set [0000], the auto redialing function will not be performed.

MODE 006 | Factory setting bit : 0 0 1 1 0 0 1 0 (Hex : 32)

Bit	Feature	Logic	Meaning	Description
76	Select dial line speed (DP speed). (PSTN1)	00	10 pps	<ul style="list-style-type: none"> This is valid only when “Switch PB/DP (MODE 006 Bit5)” sets DP. 16pps is unavailable to users.
		01	20 pps	
		10	16 pps	
		11	Not available	
5	Switch PB/DP. (PSTN1)	0	DP	Select a line type (tone or pulse) for calling. <ul style="list-style-type: none"> DP : pulse PB : tone
		1	PB	
4	Extension / External line connection. (PSTN1)	0	Extension connection	Select standard phone line connected with the system
		1	External line connection	
32		00	Fixed to “00”	
1	Select PSTN port automatically.	0	No	When the system has 2 PSTN lines and one of them is used, you can use the other line by selecting “Yes.” If you have only 1 PSTN line or wish to use 2 lines for the extension and the external lines separately, select “No.”
		1	Yes	
0		0	Fixed to “0”	

Bit	Feature	Logic	Meaning	Description
765	Select upper limit of cut-off length after printing. *	000 001 010 011 100 101 110 111	0 8 mm 12 mm 14 mm 18 mm 20 mm 24 mm Not available	When a received document is longer than the print paper and if the excess length is shorter than that specified here, it is cut off. If it is longer than that specified value with these bits, it is split into multiple pages. This feature is enabled when the following 2 conditions are satisfied: <ul style="list-style-type: none">• When printing a received document.• When bit 1 of this mode is 1.
432	Select upper limit of reduction ratio of received document. *	000 001 010 011 100 101 110 110 111	100 % 95 % 90 % 85 % 80 % 65 % 60 % 60 % Not available	When a received document is longer than the print paper, it will be reduced to fit the paper with the upper limit specified with these bits. This feature is enabled when the following 2 conditions are satisfied: <ul style="list-style-type: none">• When printing a received document• When bit 1 of this mode is 0 Example: The reduction is 100-90% when "90%" is specified. Reduction will not be done if a received document is still longer than the paper for a specified reduction.
1	Select cut off/reduction of received document: (This feature is enabled when printing a received document.) *	0 1	Reduction Cut off	This bit specifies cutting off or reducing a received document that is longer than the print paper. This bit determines that the received document will be cut off with "Select upper limit of cut off length after printing (MODE 007 Bit7-5)" or reduced with "Select upper limit of reduction ratio of received document (MODE 007 Bit 4-2)."
0	Printing specification of received document.	0 1	First page. All pages.	Specifies the timing when to start printing the received document.

MODE 008 | Factory setting bit : 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
7	Where to detect papers. (Valid only when printing a received document)*	0	From print paper	<ul style="list-style-type: none"> "From print paper" detects print papers from actual print papers while "From cassette" indicates print papers with a cassette size or the last information on print papers regardless of actual print papers.
6543	Select size of print paper for received document. (Valid only when printing a received document)*	0000	Std method 1	<p>"Std method" determines an appropriate paper for the length and the width of a print image.</p> <p>Method 1: Same width and no reduction.</p> <p>Method 2: Same width and minimum margin.</p> <p>Method 3: No reduction without considering width of paper.</p> <p>Method 4: Minimum margin without considering width of paper.</p> <p>"No wider width" will not take printer paper wider than the print image.</p> <p>No Wider</p> <p>Width 1: Same width and no reduction.</p> <p>Width 2: Same width and minimum margin.</p> <p>Width 3: No reduction without considering width of paper.</p> <p>Width 4: Minimum margin without considering width of paper.</p> <p>"Same width only" selects paper with the same width as the print image.</p>
210		000	Fixed to "000"	

MODE 009 | Factory setting bit : 0 0 0 1 1 0 1 0 (Hex : 1A)

Bit	Feature	Logic	Meaning	Description
765	Select default display of communication mode.	000	G3-1	Specifies what to display at first as communication mode. Returns "Communication mode" to its default after each operation. This soft switch is unavailable in some systems: <ul style="list-style-type: none">• With single port (including pseudo-multi port) G3 type: all are unavailable• With multi port PSTN+PSTN: G3-1, G3-2 available
43210		11010	Fixed to "11010"	

MODE 011 | Factory setting bit : 0 0 1 1 0 0 0 0 (Hex : 30)

Bit	Feature	Logic	Meaning	Description
76	Select dial line speed (DP speed). (PSTN2)	00	10 pps	This is valid only when "Switch PB/DP (MODE 011 Bit5)" sets DP. <ul style="list-style-type: none">• 16pps is unavailable to users.
5	Switch PB/DP. (PSTN2)	0	DP	Select a line type (tone or pulse) for calling. <ul style="list-style-type: none">• DP : pulse• PB : tone
4	Extension / External line connection. (PSTN2)	0	Extension connection	Select standard phone line connected with the system
3210		0000	Fixed to "0000"	

MODE 012 | Factory setting bit : 1 1 0 0 0 0 0 0 (Hex : C0)

Bit	Feature	Logic	Meaning	Description
7	Display illustrations.	0	No	
		1	Yes	
6	Select function of # key on one-touch screen.	0	Full dialing number	
		1	Abbreviated number	
5	Select how to input cassette size when Power switch is on.	0	Displays size input screen if any change is detected.	
		1	Always display size input screen without time out.	
4	Select how to input cassette size when MPT pulling out and in.	0	Always display size input screen	
		1	Displays size input screen if any change is detected.	
321		000	Fixed to "000"	
0	Accumulated sheets: Change the number of accumulated sheets.	0	Can be changed.	<ul style="list-style-type: none"> Change items "Facsimile Print", "Copy Print", "Report Print", "Send Facsimile", "PC Print", and "Send e-mail" on the "Number of sheets" tab. The accumulated sheets can be changed when maintenance mode even if this bit is set to "Cannot be changed".
		1	Changes not allowed.	

MODE 013	25 CPM	Factory setting bit : 0 0 1 0 1 0 0 1 (Hex : 29)
	35 CPM	Factory setting bit : 0 0 1 1 0 0 0 1 (Hex : 31)

Bit	Feature	Logic	Meaning	Description
765	Select numbers of fax one-touches and of print programs on auto-mode screen.		One-touch	Print program
		000	5	0
		001	4	1
		010	3	2
		011	2	3
		100	1	4
		101	0	5
		Others	Not available	
43	Determine input of numbers of copies or of FAX destinations on auto-mode screen.	00	1 digit	Regards these digits as an input of number of copies. *1: 20 CPM, 25 CPM *2: 35 CPM only
		01	2 digit *1	
		10	3 digit *2	
		11	Not available	
21		00	Fixed to "00"	
0	Select operation when INBOX forward failed.	0	Destroy document immediately	Specify the action to be taken when INBOX forwarding has failed. (Failed means communications cannot be delivered. Communications means communication via FAX and e-mail.)
		1	Destroy document after printing	

MODE 014 | **Factory setting bit : 0 0 0 0 0 0 0 (Hex : 00)**

Bit	Feature	Logic	Meaning	Description
765	Select redialing interval for resending document.	000	10 sec	
		001	30 sec	
		010	60 sec	
		011	120 sec	
		100	180 sec	
		Others	Not available	
43210		00000	Fixed to "00000"	

MODE 016 | **Factory setting bit : 0 0 0 0 0 0 0 (Hex : 00)**

Bit	Feature	Logic	Meaning	Description
76		00	Fixed to "00"	
5	Print date & time received. (Mail Mode)	0	No	
		1	Yes	
4	Position of print date & time received. (Mail Mode)	0	Inside doc.	This is valid only when "(MODE 016 Bit5)" sets Yes.
		1	Outside doc.	
32		00	Fixed to "00"	
1	Print date & time received. (RX Time Stamp)	0	No	
		1	Yes	
0	Position of print date & time received. (RX Time Stamp)	0	Inside doc.	This is valid only when "(MODE 016 Bit1)" sets Yes.
		1	Outside doc.	

MODE 018 | Factory setting bit : 0 0 0 0 0 0 0 1 (Hex : 01)

Bit	Feature	Logic	Meaning	Description
76	Select scan screen.	*	00 One-touch 1st screen	Displays screen of scanning when scan button is pushed.
		01	IP scanner	
		10	Index screen	
		11	Not available	
54	Select destination screen.	*	00 One-touch 1st screen	Displays screen of scanning when scan button is pushed.
		01	Abbr.# screen	
		10	Dial number screen	
		11	Index screen	
3210		0001	Fixed to "0001"	

MODE 020 | Factory setting bit : 0 1 0 0 0 0 0 0 (Hex : 40)

Bit	Feature	Logic	Meaning	Description
7	Displays # of reports.	0	No	"Yes" displays # of pages on phone line in addition to ordinary # of papers.
		1	Yes	
6	Trace protocol.	0	No	"Yes" prints result of protocol trace after completing communication. If next communication is proceeded before this printing, information on previous communication protocol will be deleted.
		1	Yes	
5	Display number of error lines/transmission speed.	0	No	"Yes" displays # of error lines/ transmission speed on panel and outputs port for auto checking.
		1	Yes	
4	Select monitor interval for line.	0	Phase A	Specifies interval for monitoring phone lines for G3 communication.
		1	All phases	
3	Display error codes. (Panel, report)	0	No	"Yes" displays error codes (6 digit) on panel and in report.
		1	Yes	
210		000	Fixed to "000"	

MODE 021 | Factory setting bit : 0 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
765 43		00000	Fixed to "00000"	
2	Display symbol rate.	0	No	Symbol rates are 2400/2743/2800/3000/3200/3429. Rate of 2743 is not actually used.
		1	Yes	
1	Observe EQM.	0	No	Check modem & line statuses
		1	Yes	
0	Observe probing information.	0	No	Check modem & line statuses
		1	Yes	

MODE 022 | Factory setting bit : 0 0 0 0 0 0 1 0 (Hex : 02)

Bit	Feature	Logic	Meaning	Description
765 43		00000	Fixed to "00000"	
2	FAX memory nearly full to its capacity.	0	256 KB	"Memory nearly full" means that unused memory becomes less than a specified capacity. This soft switch specifies threshold capacity.
		1	512 KB	
1	Restrict parameters of memory stored TX.	0	No	If "Yes" is selected, then all relay transmissions will proceed with A4 size when function of remote side is unknown (not learned/full dialing). For learned destination without size of 16×15.4, TX will be done with 8×7.7.
0		0	Fixed to "0"	

MODE 023 | Factory setting bit : 1 1 1 1 1 0 0 0 (Hex : F8)

Bit	Feature	Logic	Meaning	Description
7654	Select number of errors in redialing terminal of data type.	0000 0001 0010 0011 0100 0101 0110 0111 1000 1001 1010 1011 1100 1101 1110 1111	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	
3	Set margins for report image.*	0 1	No Yes	Specifies whether margin process will be proceeded for report with image margins.
21		00	Fixed to "00"	
0	Select memory over transmission mode.	0 1	Transmission continued Transmission disconnected	Specifies whether stored pages will be transmitted if memory is full while scanning documents.

MODE 024 | **Factory setting bit : 1 0 0 0 0 0 0 1 (Hex : 81)**

Bit	Feature	Logic	Meaning	Description
76		10	Fixed to "10"	
5	Display Administrator/User passwords.	0	No	"No" displays "*" .
		1	Yes	
4	Display forwarding function button.	0	No	
		1	Yes	
3	Select alarm buzzer pattern.	0	Pattern 0	
		1	Pattern 1	
21		00	Fixed to "00"	
0	Receive by other user.	0	No	
		1	Yes	

MODE 025 | **Factory setting bit : 0 1 1 1 1 1 1 1 (Hex : 7F)**

Bit	Feature	Logic	Meaning	Description
7	Service call for printer option failure.	0	No	
		1	Yes	
6	Service call for printer failure.	0	No	Specifies whether service call will be made for printer failure. Note*
		1	Yes	
5	Service call for exceeding specified number of papers.	0	No	Specifies whether service call will be made for exceeding specified # of papers. Note*
		1	Yes	
4	Service call for scanner failure.	0	No	Set whether service call will be made for scanner failure. Note*
		1	Yes	
32		00	Fixed to "00"	
1	Service call for reaching nearly life cycles of toner.	0	No	Set whether service call will be made for reaching near life cycle of toner. Note*
		1	Yes	
0	Service call for reaching life times of drum.	0	No	Set whether service call will be made for reaching life cycle of drum. Note*
		1	Yes	

Note*

This is valid only when "Allow service call? (MODE 026 Bit 6)" is set to "Yes."

MODE 026 | Factory setting bit : 1 1 0 1 1 1 1 0 (Hex : DE)

Bit	Feature	Logic	Meaning	Description
7	Allow remote maintenance.	0	No	
		1	Yes	
6	Allow service calls.	0	No	
		1	Yes	
5		0	Fixed to "0"	
4	Print incomplete TX of service call for notifying consumables.	0	No	
		1	Yes	
3	Service call for empty toner. *	0	No	
		1	Yes	
2	Service call for reaching life cycle of drum.	0	No	
		1	Yes	
1	Notify out-of-consumables.	0	No	
		1	Yes	
0		0	Fixed to "0"	

MODE 027 | Factory setting bit : 0 0 1 0 0 1 0 0 (Hex : 24)

Bit	Feature	Logic	Meaning	Description
76	Select ID display order: Specifies priority order of destination ID for printing report/ displaying on screen.	00 01 10 11	Pattern 1 Pattern 2 Pattern 3 Not available	Pattern1:1→2→3→4→5→6 2:4→5→6→1→2→3 3:4→5→1→2→3→6 1: Name registered in one-touch button 2: Destination # registered in one-touch button 3: Phone # of destination dialed 4: Destination phone # by TSI 5: Extended ID 6: Standard ID (# of TSI/CIG)
5	Display anti-dew button.	0 1	No Yes	
4	Process drum dry button.	0 1	No Yes	
3	Secure comm. with N-method	0 1	No Yes	
2	F code function.	0 1	No Yes	Need for G3 and G3-i communications.
1	Assign non-reduction TX for 2in1 scan.	0 1	No Yes	Specifies whether 2in1 page TX will be sent by A4 always or by appropriate size to receiver's capability.
0		0	Fixed to "0"	

MODE 028 | Factory setting bit : 0 1 1 0 0 0 1 1 (Hex : 63)

Bit	Feature	Logic	Meaning	Description
7	Select remote copy protocol.	0 F code 1 N method		Fixed to "0", valid at TX
6543 210	Select restricted number of prints of remote multi copy.	0000000 0000001 1100011 99 copies Others	Not available 1 copy Not available	

MODE 030 | Factory setting bit : 0 0 1 1 0 0 0 1 (Hex : 31)

Bit	Feature	Logic	Meaning	Description
7		0	Fixed to "0"	
65	Rotate print of FAX RX.	* 00 01 10 11	No rotate print Rotate print (without sort) Rotate print (with sort) Not available	"Sort" means "alternate sort" here.
4	Receive 2in1 page. (Valid for RX print)	* 0 1	No Yes	
32	Restrict print paper selection: Specifies unselectable paper (including orientation) for FAX.	00 01 10 11	No B5(L), A5 (L), and postcard No A5(L) and postcard No postcard Not available	
10	Assign mixed mm/inch papers. (Priority Set) (Valid for RX print)	00 01 10 11	Select mm only Select inch only Select both Not available	

MODE 031 | Factory setting bit : 1 0 0 0 0 0 0 1 (Hex : 81)

Bit	Feature	Logic	Meaning	Description
7	Margin process for multiple copies of report with image margins.	0	No	Valid when "Set margins for report image? (MODE 23 Bit 3)" is set to "Yes."
		1	Yes	
6	Assign output format for image margin report.	0	Same as regular report	1: Always output with A5 format regardless of the set status of paper. This is valid when a cassette has A4C papers.
		1	Always A5 format	
54		00	Fixed to "00"	
3	Data maintenance when reprint is completed. (PC print)	0	No	
		1	Yes	
21	Selects holding time of reprint document. (PC print)	00	10 min	Valid when "Presence of reprint function (MODE 031 Bit 1)" is set to "Yes."
		01	20 min	
		10	30 min	
		11	Not available	
0	Presence of reprint function (PC print)	0	No	
		1	Yes	

MODE 032 | Factory setting bit : 0 1 1 0 0 0 0 1 (Hex : 61)

Bit	Feature	Logic	Meaning	Description
7		0	Fixed to "0"	
6	Detect jamming of short doc.	0	No	"Yes" regards documents less than 70 mm as jamming.
		1	Yes	
5	Assign scan mode when FAX mixed with photos is selected.	0	GSR	8 line/mm×7.7 line/mm (200 dpi)
		1	Super GSR	16 line/mm × 15.4 line/mm (400 dpi)
4	Select metric/inch for FAX TX.	0	mm	
		1	inch	
3	Set zoom ratio for reducing legal/letter.	0	64.7 %	
		1	77.2 %	
2	Default display in range of reading.	0	mm	
		1	inch	
1	For PC print infinite form size.	0	No	
		1	Yes	
0	Set print mode corresponding to MFP.	0	Regular printing	"Emulator printing" indicates "size mismatch" without reduction, splitting, or printing on a larger size paper if there is no paper of the same size as the image.
		1	Emulator printing	

MODE 033 | Factory setting bit : 0 0 0 1 0 1 0 0 (Hex : 14)

Bit	Feature	Logic	Meaning	Description
76		00	Fixed to "00"	
54	Select draft printing mode.	00 01 10 11	No draft mode Toner saving mode High resolution saving mode Not available	"Toner saving mode" follows # of skipped pixels (bit 3-2). "High resolution saving mode", in which each pixel's size will be reduced, follows # of skipped pixels (bit 3-2) for only at points of transition between white-black along the direction of main scanning.
32	Select draft printing level.	00 01 10 11	No skipping Skip 1/4 pixel Skip 2/4 pixel Skip 3/4 pixel	Specifies skipped printing level for copy, RX, and report printing.
10	Select draft printing level between MFP.	00 01 10 11	No skipping Skip 1/4 pixel Skip 2/4 pixel Skip 3/4 pixel	Specifies skipped printing level for PC print.

MODE 034 | Factory setting bit : 0 0 0 0 0 0 1 0 (Hex : 02)

Bit	Feature	Logic	Meaning	Description
7654	Select cut off length at leading edge of paper.	0000	0	Valid only at RX printing.
		0001	2 mm	
		0010	4 mm	
		0011	6 mm	
		0100	8 mm	
		0101	10 mm	
		0110	12 mm	
		0111	14 mm	
		1000	16 mm	
		1001	18 mm	
		1010	20 mm	
		1011	22 mm	
		1100	24 mm	
		1101	26 mm	
		1110	28 mm	
		1111	30 mm	
3	Set special density.	0	No	
		1	Yes	
2		0	Fixed to "0"	
1	Overlap printing.	0	No	Valid only at RX printing. Overlapped print is fixed to 4mm regardless of line density.
		1	Yes	
0	Select upper limit for long document.	0	1 m	Document exceeding upper limit will be regarded as jamming. Notice that document more than 2m with superfine image resolution for nonstorage TX will report communication error.
		1	4 m	

MODE 035 | Factory setting bit : 0 0 0 0 0 0 1 1 (Hex : 03)

Bit	Feature	Logic	Meaning	Description
765432		000000	Fixed to "000000"	
1	RX by memory when reaching I/C lifetime.	0	No	
		1	Yes	
0	RX by memory when reaching toner empty.	0	No	
		1	Yes	

MODE 036 | Factory setting bit : 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
7654321		0000000	Fixed to "0000000"	
0	RX print order specification.	0	One page	
		1	All pages	

MODE 037 | Factory setting bit : 1 1 1 1 1 0 0 0 (Hex : F8)

Bit	Feature	Logic	Meaning	Description
7	Select FAX paper cassette (1st cassette). *	0	No	
		1	Yes	
6	Select FAX paper cassette (2nd cassette). *	0	No	
		1	Yes	
5	Select FAX paper cassette (3rd cassette). *	0	No	
		1	Yes	
4	Select FAX paper cassette (4th cassette). *	0	No	
		1	Yes	
3	Select FAX paper cassette (5th cassette). *	0	No	
		1	Yes	
210		000	Fixed to "000"	

MODE 038 | Factory setting bit : 0 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
7	Turn on print lamp when out-of-paper.	0	On when all cas- settes are out of paper	
		1	On when at least one cassette is out of paper	
6543210		0000000	Fixed to "0000000"	

MODE 040 | Factory setting bit : 1 1 1 1 1 0 1 0 (Hex : FA)

Bit	Feature	Logic	Meaning	Description
7	2-dim coding at TX. (Valid for G3 communication)	0	No	“No” : MH
		1	Yes	“Yes” : MH+MR
6	T.6 coding. (Valid for G3 communication)	0	No	“Yes”: MH+MR+MMR Valid only when “2-dim coding? (MODE 040 Bit 7)” is set to “Yes.”
		1	Yes	
5	JBIG communication. (Valid for ECM communication)	0	No	
		1	Yes	
4	Third party’s JBIG (ITU-T) communication. (Valid for ECM communication)	0	No	Valid only when “JBIG communication? (MODE 040 Bit 5)” is set to “Yes.”
		1	Yes	
3	Proprietary JBIG (ITU-T) communication. (Valid for ECM communication)	0	No	Valid only when “JBIG communication? (MODE 040 Bit 5)” is “Yes.”
		1	Yes	
2		0	Fixed to “0”	
1	JBIG capability at V.34 communication.	0	No	Valid only when “JBIG communication? (MODE 040 Bit 5)” is set to “Yes.”
		1	Yes	
0		0	Fixed to “0”	

MODE 041 | Factory setting bit : 0 1 0 0 0 0 0 0 (Hex : 40)

Bit	Feature	Logic	Meaning	Description
7		0	Fixed to “0”	
6	ECM mode.	0	No	“No” : G3
		1	Yes	“Yes.” : G3+ECM
543210		000000	Fixed to “000000”	

MODE 042 | Factory setting bit : 0 0 1 1 1 1 1 1 (Hex : 3F)

Bit	Feature	Logic	Meaning	Description
7654	Select redialing interval 1.	0000 0001 0010 0011 0100 0101 0110 0111 1000 1001 1010 1011 1100 1101 1110 1111	Not available 1 min 2 min 3 min 4 min 5 min 6 min 7 min 8 min 9 min 10 min 11 min 12 min 13 min 14 min 15 min	
3210	Select redialing interval 2.	0000 0001 0010 0011 0100 0101 0110 0111 1000 1001 1010 1011 1100 1101 1110 1111	Not available 1 min 2 min 3 min 4 min 5 min 6 min 7 min 8 min 9 min 10 min 11 min 12 min 13 min 14 min 15 min	

MODE 043 | Factory setting bit : 1 0 0 0 0 0 0 0 (Hex : 80)

Bit	Feature	Logic	Meaning	Description
76	# of resending document.	00	0	
		01	1	
		10	2	
		11	3	
5		0	Fixed to "0"	
4	Redialing when line is connected but no answer.	0	No	
		1	Yes	
3	Auto-answering call frequency.	0	Not limitation	1 - 9
		1	limitation	2 - 4
2	TCI/CSI registration screen.	0	User	telephone number setting.
		1	Service mode	
10		00	Fixed to "00"	

MODE 044	Non DTS	Factory setting bit : 1 0 1 0 0 0 0 0 (Hex : A0)
	DTS	Factory setting bit : 1 0 0 0 0 0 0 0 (Hex : 80)

Bit	Feature	Logic	Meaning	Description
7	Select threshold value for RTN sending error trace.	0	32 lines or more	Specifies # of error lines as reference of sending RTN: • “32 lines or more”: • MCF if error lines are 0 - 31 RTN if error lines are 32 or more • “64 lines or more”: MCF if error lines are 0 - 31 RTP if error lines are 32 to 63 RTN if error lines are 64 or more
		1	64 lines or more	
6	Process TCF sending specially.	0	No	
		1	Yes	
5	Select T1 timer.	0	30 sec *1	*1: Initial value for non DTS.
		1	60 sec *2	*2: Initial value for DTS.
4	Select T4 timer. (for line delay)	0	3 sec	
		1	4.5 sec	
3	Take an action for communication error from overseas.	0	No	Select “No” unless bad line is experienced.
		1	Yes	
2	Take an action for communication error from overseas.	0	No	Select “No” unless bad line is experienced.
		1	Yes	
1	Process RTN RX failure.	0	No	(discard as error)
		1	Yes	(not as error)
0	Retrain V. 34 control channel.	0	No	(discard as error)
		1	Yes	(not as error)

MODE 047 | Factory setting bit : 1 0 0 0 1 0 0 0 (Hex : 88)

Bit	Feature	Logic	Meaning	Description
765	Select V. 34 fall back tolerance. (TX)	000 001 010 011 100	0 1 2 3 4	
		Others	Not available	
432	Select V. 34 fall back tolerance. (RX)	000 001 010	0 1 2	
		011 100 Others	3 4 Not available	
10		00	Fixed to "00"	

MODE 048 | Factory setting bit : 1 1 0 0 0 1 1 0 (Hex : C6)

Bit	Feature	Logic	Meaning	Description
76	Select V.34/V.33/V.17 capabilities.	00 01 10 11	No capability above 9600 bps V.33 V.17 & V.33 V.17 & V.33 & V.34	Sets MODEM's function.
543		000	Fixed to "000"	
2	Allow V.34.	0 1	No Yes	Should be same as "V.8 (MODE 48 Bit 1)"
1	Allow V. 8.	0 1	No Yes	Should be same as "V.8 (MODE 48 Bit 2)"
0	Allow V.34 communication for extensions.	0 1	V.34 V.17	

MODE 049 | Factory setting bit : 0 0 0 0 1 1 0 1 (Hex : 0D)

Bit	Feature	Logic	Meaning	Description
765		000	Fixed to "000"	
432	Select upper limit of transmission speed. (TX)	00000 00001 00010 00011 00100 00101 00110 00111 01000 01001 01010 01011 01100	2400 bps 4800 bps 7200 bps 9600 bps 12.0 kbps 14.4 kbps 16.8 kbps 19.2 kbps 21.6 kbps 24.0 kbps 26.4 kbps 28.8 kbps 31.2 kbps	
		01101	33.6 kbps	
		Others	Not available	

MODE 050 | Factory setting bit : 0 0 0 0 1 1 0 1 (Hex : 0D)

Bit	Feature	Logic	Meaning	Description
765		000	Fixed to "000"	
432	Select upper limit of transmission speed. (RX)	00000 00001 00010 00011 00100 00101 00110 00111 01000 01001 01010 01011 01100	2400 bps 4800 bps 7200 bps 9600 bps 12.0 kbps 14.4 kbps 16.8 kbps 19.2 kbps 21.6 kbps 24.0 kbps 26.4 kbps 28.8 kbps 31.2 kbps	
		01101	33.6 kbps	
		Others	Not available	

MODE 051 | **Factory setting bit : 0 0 1 0 0 0 0 0 (Hex : 20)**

Bit	Feature	Logic	Meaning	Description
765	Declare size of print paper for received document.	000	Not available	Specifies declaration value of printing function for RX. “Auto” selects max size of paper, max size of loaded cassette, or max size of the last paper. “Auto including rotation” is equivalent to A4L set even A4T is selected by MODE 008 Bit 7.
		001	Auto	
		010	A4	
		011	B4	
		100	A3	
		101	Auto including rotation	
432 10		Others		Not available
		00000		Fixed to “00000”

MODE 052 | **Factory setting bit : 0 0 0 0 0 0 0 0 (Hex : 00)**

Bit	Feature	Logic	Meaning	Description
7	Relay TX mode. (Nonrestricted/restricted)	0	Not restricted	
		1	Restricted	
6543210		0000000		Fixed to “0000000”

MODE 053 | **Factory setting bit : 1 1 0 0 0 0 0 0 (Hex : C0)**

Bit	Feature	Logic	Meaning	Description
7		1	Fixed to “1”	
6	Select received document operation when F code receiving has failed.	0	Not cancel	
		1	Cancel	
543210		000000		Fixed to “000000”

MODE 054 | **Factory setting bit : 0 0 0 0 1 0 1 0 (Hex : 0A)**

Bit	Feature	Logic	Meaning	Description
7654		0000	Fixed to "0000"	
3	Control history of V.34 auto dialing.	0	No	Valid only when a receiver system has V.34 modulation.
		1	Yes	
2	Modulation method for V.34 manual, nonstorage TX.	0	V.17	
		1	V.34	
1	Modulation method for V.34 polling TX document.	0	V.17	
		1	V.34	
0	Modulation method for V.34 manual RX.	0	V.17	
		1	V.34	

MODE 055 | **Factory setting bit : 0 0 0 0 0 0 0 0 (Hex : 00)**

Bit	Feature	Logic	Meaning	Description
7	Set transmission level to -8 dBm or more.	0 prohibited	Permitted	By setting to "Permitted", bits 7 to 4 of MODE 085 and MODE 115 that specify the transmission level can be set to 0000 (-1 dBm) to 0111 (-8 dBm). Setting of these bits is normally prohibited. (The setting is common to MODE 085 and MODE 115.)
6543 210		0000000	Fixed to "0000000"	

MODE 056 | Factory setting bit : 0 1 0 0 0 1 0 0 (Hex : 44)

Bit	Feature	Logic	Meaning	Description
7	Select with/without F code function using PB	0	Without	Specify with/without F code function for the secondary dialing of PB.
		1	With	
564	Select tolerance time for between PB digits for F code.	000	0 sec	Specify tolerance time between digits for F code function using secondary PB dialing when detecting PB.
		001	3 sec	
		010	5 sec	
		011	7 sec	
		100	10 sec	
		101	15 sec	
		111	Not available	
3		0	Fixed to "0"	
210	Select sending time of ANSam.	000	2.0 sec	
		001	2.5 sec	
		010	3.0 sec	
		011	3.5 sec	
		100	4.0 sec	
		101	5.0 sec	
		110	6.0 sec	
		111	Not available	

MODE 057 | Factory setting bit : 0 0 1 0 0 0 1 1 (Hex : 23)

Bit	Feature	Logic	Meaning	Description
76543210	Select timing when starting ANSam TX. (PSTN1)	00000000	Not available	Specify the timing when starting ANSam TX.
		00000001	0.1 sec	
		00100011	2 sec	
		01111000	25.5 sec	

MODE 080 | Factory setting bit : 0 0 1 0 0 0 1 1 (Hex : 23)

Bit	Feature	Logic	Meaning	Description	
76543210	Select time for line connection. (PSTN1)	00000000	0 sec		
		00000001	0.5 sec		
		00100011	17.5 sec		
		01111000	60 sec		
		Others	Not available		

MODE 082	Non DTS	Factory setting bit : 0 0 0 0 1 0 0 0 (Hex : 08)
	DTS	Factory setting bit : 0 0 1 0 1 1 0 0 (Hex : 2C)

Bit	Feature	Logic	Meaning	Description
76		00	Fixed to "00"	
5	Detect busy tone. (PSTN1)	0	No *1	*1: Initial value for non DTS.
		1	Yes *2	*2: Initial value for DTS.
4		0	Fixed to "0"	
3	Detect line disconnection. (inverted polarity) (PSTN1)	0	No	
		1	Yes	
210		***	000: Initial value for non DTS.	
			100: Initial value for DTS.	

MODE 084	Factory setting bit : 0 0 0 1 0 0 0 0 (Hex : 10)
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Bit	Feature	Logic	Meaning	Description
76		00	Fixed to "00"	
5432	Select PB sending level. (PSTN1)	0000	-1 dBm	
		0100	-5 dBm	
10	Select PB detection method. (PSTN1)	1111	-16 dBm	
		00	Method 1	Instantaneous monitor timer = 5 ms/ off monitor timer = 40 ms
		01	Method 2	Instantaneous monitor timer = 15 ms/ off monitor timer = 30 ms
		10	Method 3	Instantaneous monitor timer = 25 ms/ off monitor timer = 20 ms
		11	Method 4	Instantaneous monitor timer = 35 ms/ off monitor timer = 10 ms

MODE 085 | Factory setting bit : 0 1 1 1 0 0 0 0 (Hex : 70)

Bit	Feature	Logic	Meaning	Description
7654	Select TX level. (PSTN1)	0000	-1 dBm*	Specifies TX levels other than PB.
		0111	-8 dBm*	*:This is valid only when MODE 055 Bit7 is "Permitted".
		1000	-9 dBm	If MODE 055 Bit7 is "Prohibited", 0000 to
		1001	-10 dBm	0111 is -9 dBm.
		1010	-11 dBm	
		1011	-12 dBm	
		1100	-13 dBm	
		1101	-14 dBm	
		1110	-15 dBm	
		1111	-16 dBm	
3210		0000	Fixed to "0000"	

MODE 086 | Factory setting bit : 0 1 0 0 0 0 0 0 (Hex : 40)

Bit	Feature	Logic	Meaning	Description
76	Select RX attenuator. (PSTN1)	00	0 dB (-48 dBm)	Signals controlled by this soft switch are 1300Hz detection, PB tone detection, V29 & V27 ter, V21 signal detection, and all tonal signal.
		01	5 dB (-43 dBm)	
		10	10 dB (-38 dBm)	
		11	15 dB (-33 dBm)	
543210		000000	Fixed to "000000"	

MODE 087 | Factory setting bit : 1 0 0 1 0 0 0 0 (Hex : 90)

Bit	Feature	Logic	Meaning	Description
76	Select detection time of continuous ringer. (PSTN1)	00	No detection	
		01	1.8 sec	
		10	3.0 sec	
		11	10 sec	
543	Select frequency for ringer detection. (PSTN1)	000	10 - 27.5 Hz	
		001	10 - 75 Hz	
		010	10 - 90 Hz	
		011	10 - 200 Hz	
		Others	Not available	
210		000	Fixed to "000"	

MODE 088 | Factory setting bit : 0 1 0 0 0 0 0 0 (Hex : 40)

Bit	Feature	Logic	Meaning	Description
7		0	Fixed to "0"	
6	Select process mode at detection time out of 2nd dial tone. (PSTN1)	0	Keeps same operation as before detection even after time out	
		1	Generates TX error at time out	
		00	Fixed to "00"	
3	1300 Hz detection. (PSTN1)	0	-28 dBm	
		1	-36 dBm	
210		000	Fixed to "000"	

MODE 089 | Factory setting bit : 0 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
7	Select TX method. (PSTN1)	0	Insert pause after prefix for external lines	
		1	Insert pause after 1st dial	
6	Select method of detecting dial prefix for external lines. (PSTN1)	0	Dial # search method	
		1	Pause search method	
5432	Select prefix # for external lines. (PSTN1) *	0000	0	Valid only when "Select method of detecting dial prefix for external lines (MODE 089 Bit6)" is set to "Dial # search method."
		0001	1	
		0010	2	
		0011	3	
		0100	4	
		0101	5	
		0110	6	
		0111	7	
		1000	8	
		1001	9	
		Others	Not available	
10		00	Fixed to "00"	

MODE 092 | **Factory setting bit : 0 1 1 1 0 0 0 0 (Hex : 70)**

Bit	Feature	Logic	Meaning	Description
7	Send V.29 echo protection tone. (PSTN1)	0	No	
		1	Yes	
6	Send V.17 echo protection tone. (PSTN1)	0	No	
		1	Yes	
5	Send V.33 echo protection tone. (PSTN1)	0	No	
		1	Yes	
43	Select V.17 and V.33 carrier frequency. (PSTN1)	00	1800 Hz	
		01	1700 Hz	
		10	1800 +1700 Hz	
		11	Not available	
210		000	Fixed to "000"	

MODE 093 | **Factory setting bit : 0 1 0 0 1 0 0 0 (Hex : 48)**

Bit	Feature	Logic	Meaning	Description
76	Select timing for starting CED sending. (PSTN1)	00	0 sec	Specifies time interval from line connection to starting sending CED.
		01	2 sec	
		10 11	2.5 sec 7 sec	
54	Select CED frequency. (PSTN1)	00	2100 Hz	Specifies frequency to carry CED or N/A selection.
		01	1080 Hz	
		10	1300 Hz	
		11	Not available	
3	Process CED echo. (PSTN1)	0	No	Specifies whether CED echo will be processed by set interval of 500 ms between CED and initial identification.
		1	Yes	
2	Process incoming command echo. (PSTN1)	0	No	Specifies whether incoming echo will be processed by set interval of 500 ms between receiving initial identification and incoming command.
		1	Yes	
01	Control channel data rate. (PSTN1)	00	1200 bps	
		01	Non 1200 bps	
		10	2400 bps	
		11	Non 2400 bps	

MODE 094 | Factory setting bit : 0 0 0 0 1 1 0 0 (Hex : 0C)

Bit	Feature	Logic	Meaning	Description
7654		0000	Fixed to "0000"	
3	Lock AGC in V.33 mode. (PSTN1)	0	No	
		1	Yes	
2	Lock AGC in V.17 mode. (PSTN1)	0	No	
		1	Yes	
1	Lock AGC in V.29 mode. (PSTN1)	0	No	
		1	Yes	
0	Lock AGC in V.27ter mode. (PSTN1)	0	No	
		1	Yes	

MODE 095 | Factory setting bit : 0 0 1 0 0 0 0 (Hex : 20)

Bit	Feature	Logic	Meaning	Description
76	Adjust digital TX cable equalizer. (PSTN1)	00	0 dB	
		01	4 dB	
		10	8 dB	
		11	12 dB	
54	Adjust digital RX cable equalizer. (PSTN1)	00	0 dB	For V.29, actual value will be 4 dB more than the specified value.
		01	4 dB	
		10	8 dB	
		11	12 dB	
3210		0000	Fixed to "0000"	

MODE 096 | Factory setting bit : 0 0 0 1 0 1 0 0 (Hex : 14)

Bit	Feature	Logic	Meaning	Description
76		00	Fixed to "00"	
54	Select time for CI signal sending ON. (PSTN1)	00	0.5 sec	Use this soft switch for error in V8 sequence.
		01	1.0 sec	
		10	1.5 sec	
		11	2.0 sec	
321	Select time for CI signal sending OFF. (PSTN1)	000	0.4 sec	Use this soft switch for error in V8 sequence.
		001	0.8 sec	
		010	1.0 sec	
		011	1.2 sec	
		100	1.6 sec	
		101	2.0 sec	
		Others	Not available	
0		0	Fixed to "0"	

MODE 097 | Factory setting bit : 0 0 0 1 0 1 0 0 (Hex : 14)

Bit	Feature	Logic	Meaning	Description
7	Attenuate TCF/NTCF sending level. (PSTN1)	0	No	Specifies whether sending level of TCF and NTCF will be attenuated. For V33/V29, level of attenuation is determined by MODE 085 Bit 7-4 and MODE 097 Bit 6. Otherwise, level of attenuation is determined by MODE 085 Bit 7-4.
		1	Yes -3 dB	
6	Attenuate V17/V33/V29 sending level. (PSTN1)	0	No	Specifies whether sending level of V17/V33/V29 will be attenuated. Level of attenuation is determined by MODE 085 Bit 7-4 and MODE 097 Bit 6.
		1	Yes -3 dB	
5		0	Fixed to "0"	
432	Select V.34 symbol rate. (PSTN1)	000	2400 Sym/S	
		001	Not available	
		010	2800 Sym/S	
		011	3000 Sym/S	
		100	3200 Sym/S	
		101	3429 Sym/S	
		Others	Not available	
10		00	Fixed to "00"	

MODE 098 | Factory setting bit : 0 1 0 0 0 1 1 0 (Hex : 46)

Bit	Feature	Logic	Meaning	Description
76	Select starting time of sending CI signal. (PSTN1)	00 01 10 11	0 sec 1 sec 2 sec 3 sec	Use this soft switch for error in V8 sequence.
54		00	Fixed to "00"	
3210	Select EQM threshold value. (PSTN1)	0000 0001 0010 0011 0100 0101 0110 0111 1000 1001 1010 1011 1100 Others	-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 Not available	

MODE 099	Factory setting bit : 1 0 0 0 1 0 0 0 (Hex : 88)
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Bit	Feature	Logic	Meaning	Description
7654	Select threshold value 1 for symbol speed. (PSTN1)	0000 0001 0010 0011 0100 0101 0110 0111	-8 -7 -6 -5 -4 -3 -2 -1	Specifies range of tolerance for characteristic distortion of V. 34 line.
		1000	0	
		1001 1010 1011 1100 1101 1110 1111	1 2 3 4 5 6 7	
3210	Select threshold value 2 for symbol speed. (PSTN1)	0000 0001 0010 0011 0100 0101 0110 0111	-8 -7 -6 -5 -4 -3 -2 -1	Specifies minimum tolerance level of S/N ratio in V.34.
		1000	0	
		1001 1010 1011 1100 1101 1110 1111	1 2 3 4 5 6 7	

MODE 110	Factory setting bit : 0 0 1 0 0 0 1 1 (Hex : 23)
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Bit	Feature	Logic	Meaning	Description
76543210	Select time for line connection. (PSTN2)	00000000 00000001 00100011	0 sec 0.5 sec 17.5 sec	
		01111000 Others	60 sec Not available	

MODE 112	Factory setting bit : 0 0 1 0 1 0 0 0 (Hex : 28)
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Bit	Feature	Logic	Meaning	Description
76		00	Fixed to "00"	
5	Detect busy tone. (PSTN2)	0	No	
		1	Yes	
4		0	Fixed to "0"	
3	Detect line disconnection (inverted polarity). (PSTN2)	0	No	
		1	Yes	
210		000	Fixed to "000"	

MODE 114 | Factory setting bit : 0 0 0 1 0 1 0 0 (Hex : 14)

Bit	Feature	Logic	Meaning	Description
76		00	Fixed to "00"	
5432	Select PB sending level. (PSTN2)	0000 0001 0010 0011 0100 0101	-1 dBm -2 dBm -3 dBm -4 dBm -5 dBm -6 dBm	
		0110 0111 1000 1001 1010 1011 1100 1101 1110 1111	-7 dBm -8 dBm -9 dBm -10 dBm -11 dBm -12 dBm -13 dBm -14 dBm -15 dBm -16 dBm	
10	Select PB detection method. (PSTN2)	00	Method 1	Instantaneous monitor timer = 5 ms/ off monitor timer = 40 ms
		01	Method 2	Instantaneous monitor timer = 15 ms/ off monitor timer = 30 ms
		10	Method 3	Instantaneous monitor timer = 25 ms/ off monitor timer = 20 ms
		11	Method 4	Instantaneous monitor timer = 35 ms/ off monitor timer = 10 ms

MODE 115 | Factory setting bit : 0 1 1 1 0 0 0 0 (Hex : 70)

Bit	Feature	Logic	Meaning	Description
7654	Select TX level. (PSTN2)	0000	-1 dBm*	Specifies TX levels other than PB.
		0111	-8 dBm*	*:This is valid only when MODE 055 Bit7 is "Permitted".
		1000	-9 dBm	If MODE 055 Bit7 is "Prohibited", 0000 to
		1001	-10 dBm	0111 is -9 dBm.
		1010	-11 dBm	
		1011	-12 dBm	
		1100	-13 dBm	
		1101	-14 dBm	
		1110	-15 dBm	
		1111	-16 dBm	
3210		0000	Fixed to "0000"	

MODE 116 | Factory setting bit : 0 1 0 0 0 0 0 0 (Hex : 40)

Bit	Feature	Logic	Meaning	Description
76	Select RX attenuator. (PSTN2)	00	0 dB (-48 dBm)	Signals controlled by this soft switch are 1300Hz detection, PB tone detection, V29 & V27 ter, V21 signal detection, and all tonal signal.
		01	5 dB (-43 dBm)	
		10	10 dB (-38 dBm)	
		11	15 dB (-33 dBm)	
543210		000000	Fixed to "000000"	

MODE 117 | Factory setting bit : 1 0 0 1 0 0 0 0 (Hex : 90)

Bit	Feature	Logic	Meaning	Description
76	Select detection time of continuous ringer. (PSTN2)	00	No detection	
		01	1.8 sec	
		10	3.0 sec	
		11	10 sec	
543	Select frequency for ringer detection. (PSTN2)	000	10 - 27.5 Hz	
		001	10 - 75 Hz	
		010	10 - 90 Hz	
		011	10 - 200 Hz	
		Others	Not available	
210		000	Fixed to "000"	

MODE 118 | Factory setting bit : 0 1 0 0 0 0 0 0 (Hex : 40)

Bit	Feature	Logic	Meaning	Description
7		0	Fixed to "0"	
6	Select process mode at detection time out of 2nd dial tone. (PSTN2)	0	Keeps same operation as before detection even after time out	
		1	Generates TX error at time out	
543210		000000	Fixed to "000000"	

MODE 119 | Factory setting bit : 0 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
7	Select TX method. (PSTN2)	0	Insert pause after prefix for external lines	
		1	Insert pause after 1st dial	
6	Select method of detecting dial prefix for external lines. (PSTN2)	0	Dial # search method	
		1	Pause search method	
5432	Select prefix # for external lines. (PSTN2) *	0000	0	Valid only when "Select method of detecting dial prefix for external lines (MODE 119 Bit6)" is set to "Dial # search method."
		0001	1	
		0010	2	
		0011	3	
		0100	4	
		0101	5	
		0110	6	
		0111	7	
		1000	8	
		1001	9	
		Others	Not available	
10		00	Fixed to "00"	

MODE 122 | Factory setting bit : 0 1 1 1 0 0 0 0 (Hex : 70)

Bit	Feature	Logic	Meaning	Description
7	Send V.29 echo protection tone. (PSTN2)	0	No	
		1	Yes	
6	Send V.17 echo protection tone. (PSTN2)	0	No	
		1	Yes	
5	Send V.33 echo protection tone. (PSTN2)	0	No	
		1	Yes	
43	Select V.17 and V.33 carrier frequency. (PSTN2)	00	1800 Hz	
		01	1700 Hz	
		10	1800 +1700 Hz	
		11	Not available	
210		000	Fixed to "000"	

MODE 123 | Factory setting bit : 0 1 0 0 1 0 0 0 (Hex : 48)

Bit	Feature	Logic	Meaning	Description
76	Select timing for starting CED sending. (PSTN2)	00	0 sec	Specifies time interval from line connection to starting sending CED
		01	2 sec	
		10 11	2.5 sec 7 sec	
54	Select CED frequency. (PSTN2)	00	2100 Hz	Specifies frequency to carry CED or N/A selection.
		01	1080 Hz	
		10	1300 Hz	
		11	Not available	
3	Process CED echo. (PSTN2)	0	No	Specifies whether CED echo will be processed by set interval of 500 ms between CED and initial identification.
		1	Yes	
2	Process incoming command echo. (PSTN2)	0	No	Specifies whether incoming echo will be processed by set interval of 500 ms between receiving initial identification and incoming command.
		1	Yes	
01	Control channel data rate. (PSTN2)	00	1200 bps	
		01	Non 1200 bps	
		10	2400 bps	
		11	Non 2400 bps	

MODE 124 | **Factory setting bit : 0 0 0 0 1 1 0 0 (Hex : 0C)**

Bit	Feature	Logic	Meaning	Description
7654		0000	Fixed to "0000"	
3	Lock AGC in V.33 mode. (PSTN2)	0	No	
		1	Yes	
2	Lock AGC in V.17 mode. (PSTN2)	0	No	
		1	Yes	
1	Lock AGC in V.29 mode. (PSTN2)	0	No	
		1	Yes	
0	Lock AGC in V.27ter mode. (PSTN2)	0	No	
		1	Yes	

MODE 125 | **Factory setting bit : 0 0 1 0 0 0 0 (Hex : 20)**

Bit	Feature	Logic	Meaning	Description
76	Select digital TX cable equalizer. (PSTN2)	00	0 dB	
		01	4 dB	
		10	8 dB	
		11	12 dB	
54	Select digital RX cable equalizer. (PSTN2)	00	0 dB	For V.29, actual value will be 4 dB more than the specified value.
		01	4 dB	
		10	8 dB	
		11	12 dB	
3210		0000	Fixed to "0000"	

MODE 126 | Factory setting bit : 0 0 0 1 0 1 0 0 (Hex : 14)

Bit	Feature	Logic	Meaning	Description
76		00	Fixed to "00"	
54	Select time for CI signal sending ON. (PSTN2)	00	0.5 sec	Use this soft switch for error in V8 sequence.
		01	1.0 sec	
		10	1.5 sec	
		11	2.0 sec	
321	Select time for CI signal sending OFF. (PSTN2)	000	0.4 sec	Use this soft switch for error in V8 sequence.
		001	0.8 sec	
		010	1.0 sec	
		011	1.2 sec	
		100	1.6 sec	
		101	2.0 sec	
		Others	Not available	
0		0	Fixed to "0"	

MODE 127 | Factory setting bit : 0 0 0 1 0 1 0 0 (Hex : 14)

Bit	Feature	Logic	Meaning	Description
7	Attenuate TCF/NTCF sending level. (PSTN1)	0 No		Specifies whether sending level of TCF and NTCF will be attenuated. For V33/V29, level of attenuation is determined by MODE 115 Bit 7-4 and MODE 127 Bit 6. Otherwise, level of attenuation is determined by MODE 115 Bit 7-4.
		1	Yes -3 dB	
6	Attenuate V17/V33/V29 sending level. (PSTN2)	0 No		Specifies whether sending level of V17/V33/V29 will be attenuated. Level of attenuation is determined by MODE 115 Bit 7-4 and MODE 127 Bit 6.
		1	Yes -3 dB	
5		0	Fixed to "0"	
432	Select V.34 symbol rate. (PSTN2)	000	2400 Sym/S	
		001	Not available	
		010	2800 Sym/S	
		011	3000 Sym/S	
		100	3200 Sym/S	
		101	3429 Sym/S	
		Others	Not available	
10		00	Fixed to "00"	

MODE 128 | Factory setting bit : 0 1 0 0 0 1 1 0 (Hex : 46)

Bit	Feature	Logic	Meaning	Description
76	Select starting time of sending CI signal. (PSTN2)	00	0 sec	Use this soft switch for error in V8 sequence.
		01	1 sec	
		10	2 sec	
		11	3 sec	
54		00	Fixed to "00"	
3210	Select EQM threshold value. (PSTN2)	0000	-6	
		0001	-5	
		0010	-4	
		0011	-3	
		0100	-2	
		0101	-1	
		0110	0	
		0111	1	
		1000	2	
		1001	3	
		1010	4	
		1011	5	
		1100	6	
		Others	Not available	

MODE 129 | Factory setting bit : 1 0 0 0 1 0 0 0 (Hex : 88)

Bit	Feature	Logic	Meaning	Description
7654	Select threshold value 1 for symbol speed. (PSTN2)	0000 0001 0010 0011 0100 0101 0110 0111	-8 -7 -6 -5 -4 -3 -2 -1	Specifies range of tolerance for characteristic distortion of V. 34 line.
		1000	0	
		1001 1010 1011 1100 1101 1110 1111	1 2 3 4 5 6 7	
3210	Select threshold value 2 for symbol speed. (PSTN2)	0000 0001 0010 0011 0100 0101 0110 0111	-8 -7 -6 -5 -4 -3 -2 -1	Specifies minimum tolerance level of S/N ratio in V.34.
		1000	0	
		1001 1010 1011 1100 1101 1110 1111	1 2 3 4 5 6 7	

MODE 190 | Factory setting bit : 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
7	Restrict SF/SSF communication (TX).	0	No	For risk management according to new recommendation of G3 high resolution transmission.
		1	Yes	
6	Restrict SF/SSF communication (RX).	0	No	For risk management according to new recommendation of G3 high resolution transmission.
		1	Yes	
543210		000000	Fixed to "000000"	

MODE 192 | Factory setting bit : 1 1 0 0 0 0 0 (Hex : C0)

Bit	Feature	Logic	Meaning	Description
76	Select order of displaying year to date.	00	Year-Month-Date	
		01	Not available	
10		10	Date-month-year	
		11	Month-date-year	
543210		000000	Fixed to "000000"	

MODE 197 | Factory setting bit : 1 1 0 0 0 0 0 0 (Hex : C0)

Bit	Feature	Logic	Meaning	Description
7	Allow summer time.	0	No	
		1	Yes	
6	Display summer time button (Daylight Svgs. Time)	0	No	
		1	Yes	
54		00	Fixed to "00"	
3210	Select summer time pattern.		Start time	End time
		0000	AM2 1st-Sun APR.	AM2 last-Sun OCT.
		0001	AM2 last-Sun MAR.	AM2 last-Sun OCT.
		0010	AM2 last-Fri APR.	AM2 last-Thu SEP.
		0011	AM2 1st-Sun MAR.	AM2 last-Sun SEP.
		0100	AM2 1st-Sun SEP.	AM2 last-Sun APR.
		0101	AM2 last-Sun OCT.	AM2 last-Sun MAR.
		0110	AM2 1st-Sun OCT.	AM2 last-Sun MAR.
		0111	AM2 1st-Sun OCT.	AM2 last-Sun FEB.
		1000	AM2 1st-Sun NOV.	AM2 last-Sun FEB.
		1001	AM2 APR. 1	AM2 last-Sun OCT.
		1010	AM2 APR. 1	AM2 OCT. 1
		Others	Not available	

MODE 210 | Factory setting bit : 0 0 0 0 0 1 0 1 (Hex : 05)

Bit	Feature	Logic	Meaning	Description
76543210	DP steady current time 1. (PSTN1)	00000000 00000001 00000101 11111111	0 msec 10 msec 50 msec 2550 msec	Set interval from S relay ON to DP photo coupler ON. Valid only when “DP/PB switch (MODE 006 Bit 5)” selects “DP.”

MODE 211 | Factory setting bit : 0 0 0 0 1 1 0 0 (Hex : 0C)

Bit	Feature	Logic	Meaning	Description
76543210	DP steady current time 2. (PSTN1)	00000000 00000001 00001100 11111111	0 msec 10 msec 120 msec 2550 msec	Set interval from DP photo coupler OFF to S relay OFF. Valid only when “DP/PB switch (MODE 006 Bit 5)” selects “DP.”

MODE 212 | Factory setting bit : 0 1 0 0 0 0 0 0 (Hex : 40)

Bit	Feature	Logic	Meaning	Description
76	Select DP make rate. (PSTN1)	00	33 %	
		01	40 %	
		Others	Not available	
543210		000000	Fixed to “000000”	

MODE 230 | Factory setting bit : 0 0 0 0 0 1 0 1 (Hex : 05)

Bit	Feature	Logic	Meaning	Description
76543210	DP steady current time 1. (PSTN2)	00000000 00000001 00000101 11111111	0 msec 10 msec 50 msec 2550 msec	Set interval from S relay ON to DP photo coupler ON. Valid only when “DP/PB switch (MODE 011 Bit 5)” selects “DP”.

MODE 231 | Factory setting bit : 0 0 0 0 0 0 1 0 (Hex : 02)

Bit	Feature	Logic	Meaning	Description
76543210	DP steady current time 2. (PSTN2)	00000000 00000001 00000010 11111111	0 msec 10 msec 200 msec 2550 msec	Set interval from DP photo coupler OFF to S relay OFF. Valid only when “DP/PB switch (MODE 011 Bit 5)” selects “DP”.

MODE 232 | Factory setting bit : 0 1 0 0 0 0 0 0 (Hex : 40)

Bit	Feature	Logic	Meaning	Description
76	Select DP make rate. (PSTN2)	00 01 Others	33 % 40 % Not available	
543210		000000	Fixed to “000000”	

MODE 400 | Factory setting bit : 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
7	Memory recall. (copy)	0 *	No	Holds image data even after ejecting last page to select "enable/disable" to recall it.
6	Mixed original detection. (copy)	0 *	No	Selects priority doc mixed mode when Power source is ON and panel reset key is ON.
543210		000000	Fixed to "000000"	

MODE 401 | Factory setting bit : 0 0 0 0 0 1 0 0 (Hex : 04)

Bit	Feature	Logic	Meaning	Description
765432	Language selected.	00000000 00000001 00000010 11111111	Japanese English Arbitrary setting	Selects the language to be displayed on the touch panel.
10		00	Fixed to "00"	

MODE 402 | **Factory setting bit : 0 0 0 0 0 0 0 1 (Hex : 01)**

Bit	Feature	Logic	Meaning	Description
7	Simplex / Duplex. (copy)	0 1	1 sided 2 sided	
65	Original ► Copy default (copy)	00 01 Others	1 sided 2 sided Not available	
43	Auto paper/Auto size. (copy)*	00 01 10 11	APS AMS Not available Manual	APS: Auto Paper Selection. AMS: Auto Magnification Selection.
2	Simplex / Duplex. (copy)	0 1	Copy Printer	Sets the print form for overseas PC printing. Copy: All PC prints are output together after data is received. Printer: PC prints are output successively each time data is received.
10	Select priority application. (after auto clear and panel reset)*	00 01 10 11	FAX Copy Auto Scanner	Sets the initial status screen (Copy, FAX, Auto or scanner).

MODE 403 | **Factory setting bit : 0 0 0 0 0 0 0 1 (Hex : 01)**

Bit	Feature	Logic	Meaning	Description
7	Select print saving magnification. (copy)	0 1	Recommended magnification Full size	Sets magnification when 2in1, 4in1, booklet or 2in1 division is selected.
654 321		000000		Fixed to "000000"
0	Plug-in counter, ID key reset (copy)	0 1	No Yes	Selects whether to do panel reset or not when ID key will be pressed.

MODE 404 | **Factory setting bit : 0 0 0 0 0 0 0 1 (Hex : 01)**

Bit	Feature	Logic	Meaning	Description
7654	Auto panel reset. (copy)	00000000	Not reset	Setting of whether or not auto clear takes place after the specified time from the end of copying or a key operation and also the time setting. 1-minute steps
3210		00000001	1 min	
		11110000	240 min	
		11111111	30 sec	
		Others	Not available	

MODE 405 | **Factory setting bit : 0 0 0 0 1 1 1 1 (Hex : 0F)**

Bit	Feature	Logic	Meaning	Description
7654	Energy save mode. (copy)	00000001	1 min	Setting of auto preheat time after the specified time from the end of copying or a key operation. 1-minute steps
3210		00001111	15 min	
		11110000	240 min	
		Others	Not available	

MODE 406 | **25 CPM** | **Factory setting bit : 0 0 0 1 1 1 0 (Hex : 1E)**
35 CPM | **Factory setting bit : 0 0 1 1 1 0 0 (Hex : 3C)**

Bit	Feature	Logic	Meaning	Description
7654	Select auto power source off time.	00000000	OFF	• Setting of whether or not to cut OFF the power to the machine after the specified time from the end of copying or a key operation, and also the time setting • When MODE 416 Bit 0 "Auto power off cancel" is set to "Enabled", the setting becomes "No". 1-minute steps No FAX: Auto power OFF With FAX: Heater OFF
3210		00001111	15 min	
		00011110	30 min *1	
		00111100	60 min *2	
		11110000	240 min	
		Others	Not available	

*1: Initial value for a 20 cpm Copier
 *2: Initial value for 25 cpm Copier and 35 cpm Copier

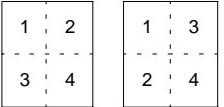
MODE 407 | Factory setting bit : 0 0 0 0 0 0 0 1 (Hex : 01)

Bit	Feature	Logic	Meaning	Description
7654	LCD back-light off.	00000000	Not reset	Setting of the back light OFF
3210	(copy)	00000001	1 min	time after the specified time from the end of a key opera- tion.
		11110000 Others	240 min Not available	1-minute steps.

MODE 408 | Factory setting bit : 0 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
7654	Select drawer. (paper) (Copy)	0000	1st drawer	Selects priority drawer when APS (auto paper mode) or manual mode is selected.
		0001 0010 0011 0100 1010 1100 Others	2nd drawer 3rd drawer 4th drawer 5th drawer Manual LCC Not available	
3210		0000	Fixed to "0000"	

MODE 409 | Factory setting bit : 0 0 0 0 1 0 0 0 (Hex : 08)

Bit	Feature	Logic	Meaning	Description
76	4in1 copy order. (Copy)*	00 01 Others	Pattern 1 Pattern 2 Not available	Setting of image layout sequence for 4in1 copy operation. Pattern 1: Pattern 2:  20 cpm Copier and 35 cpm Copier only
5	Density priority. (Copy)	0 1	AE Manual	Density mode setting.
4321	Original Image Type. (Copy)	0000 0100 1000 1100 Others	Text/Photo Text Photo Special image quality Not available	When MODE 409 Bit5 is set to "AE (auto)", the "Photo mode" cannot be set.
0		0	Fixed to "0"	

MODE 410 | Factory setting bit : 0 1 0 0 0 1 0 0 (Hex : 44)

Bit	Feature	Logic	Meaning	Description
76	Default copy output levels. (Copy)	00	Darker	Selection of level in auto density mode.
		01	Normal	
		10 11	Not available Lighter	
5		0	Fixed to "0"	
4	Density. (Copy : ADF only)	0	Normal	Image is read at the specified density.
		1	Black streak prevention	
3210	Default copy output levels. (Copy)	0000	EXP 1	Setting of the manual density level selected when the mode is initialized, and also the level selected when the mode is changed from auto density to manual density. EXP1 (Lighter) EXP5 (Normal) EXP9 (Darker)
		0001	EXP 2	
		0010	EXP 3	
		0011	EXP 4	
		0100	EXP 5	
		0101	EXP 6	
		0110	EXP 7	
		0111	EXP 8	
		1000	EXP 9	
		Others	Not available	

MODE 411 | Factory setting bit : 0 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
7	Code bit. (Copy)	0	+	Sets the + or - direction of Priority Density of MODE 411 Bit2-0.
		1	-	
6543		0000	Fixed to "0000"	
210	Priority density. (copy)	000	0	Sets the image density for making a print, by varying the developing bias.
		001	1	
		010	2	
		011	3	
		Others	Not available	
		*		

MODE 412 | Factory setting bit : 0 0 0 0 1 0 0 0 (Hex : 08)

Bit	Feature	Logic	Meaning	Description
76	Priority sort mode. (Copy)	00	Non Sort	Selection of the paper exit mode that has priority when the paper exit system option is installed.
		01	Sort	
		10	Not available	
		11	Group	
5	Priority stapling mode. (Copy)	0	No	Can be set simultaneously with a mode other than "Non-sort" of MODE 412 Bit 7-6.
		1	Yes	
4	Priority punch mode. (Copy)	0	No	Can be set simultaneously with each mode of MODE 412 Bit 7-6.
		1	Yes	
3	Intelligent sorting. (Copy)	0	No	Setting of change over, or no change over, between sort and non-sort according to the number of originals and the key operation.
		1	Yes	
210		000	Fixed to "000"	

MODE 413 | Factory setting bit : 0 0 0 1 0 1 0 0 (Hex : 14)

Bit	Feature	Logic	Meaning	Description
76	FAX (Mail) output bin specification.	00	1st Drawer	Setting of tray to exit FAX (mail) prints when a finisher is installed.
		01	Elevator tray	"Option tray" is effective when the option tray is installed.
		10	Option tray	
		11	Not available	
54	PC print output bin specification.	00	1st Drawer	Setting of tray to exit PC prints when a finisher is installed.
		01	Elevator tray	"Option tray" is effective when the option tray is installed.
		10	Option tray	
		11	Not available	
3	PC print output bin specification.	0	1 bin	Setting of the bin to exit PC prints when a job tray is installed.
		1	2 bins	
2	Copy output bin specification.	0	1 bin	Setting of the bin to exit copies when a job tray is installed.
		1	2 bins	
1	FAX (Mail) output bin specification.	0	1 bin	Setting of the bin to exit FAX (mail) prints when a job tray is installed.
		1	2 bins	
0		0	Fixed to "0"	

MODE 414 | Factory setting bit : 1 0 1 0 0 0 0 0 (Hex : A0)

Bit	Feature	Logic	Meaning	Description
7654	Image compression when reserving capacity in the copy memory. (copy)	0101	0.5	Indicates the memory reserve capacity per copy converted into image compression, and reserves memory capacity before start of scanning, according to the set compression corresponding to the original used.
		0110	0.6	
		0111	0.7	
		1000	0.8	
		1001	0.9	
		1010	1.0	
		1011	1.1	
		1100	1.2	
		1101	1.3	
		Others	Not available	
3210		0000	Fixed to "0000"	

MODE 415 | Factory setting bit : 0 1 1 0 1 1 0 0 (Hex : 6C)

Bit	Feature	Logic	Meaning	Description
765	Beep volume. (copy) *	000	0 (no tone)	Setting of sound volume of tone emitted when key is pressed.
		001	1	
		010	2	
		011	3	
		100	4	
		101	5	
	Others	Not available		
432	Alarm volume. (copy) *	000	0 (no tone)	Setting of sound volume of alarm tone.
		001	1	
		010	2	
		011	3	
		100	4	
	101	5		
	Others	Not available		
10		00	Fixed to "00"	

MODE 416 | Factory setting bit : 0 1 1 0 0 0 0 0 (Hex : 60)

Bit	Feature	Logic	Meaning	Description
765	Sound volume setting 3 monitor tone. (copy)*	000 001 010 011 100 101 Others	0 (no tone) 1 2 3 4 5 Not available	Line monitor tone volume setting.
4	Orientation of images when finisher is connected. (copy)	0	Not facing each other	Sets the orientation of the image when a finisher is connected.
32		00	Fixed to "00"	
1	Overseas scanner file format. (copy)*	0	TIFF	Sets the file format used with an overseas scanner. (For maintenance use by the administrator)
0	Disable auto shut off.	0	No	Setting that enables or disables to select "Disabled" setting for Auto Shut Off function.
		1	Yes	

MODE 417 | Factory setting bit : 0 1 1 0 0 0 1 1 (Hex : 63)

Bit	Feature	Logic	Meaning	Description
7	Max copy sets. (Copy)	0	No	Setting for placing or not placing an input limit on the copy quantity.
		1	Yes	
6543 210	Set copy quantity limit. (copy)	0000000 0000001 1100011	Not available 1 99	Sets the limit quantity when Max. Copy Sets of MODE 417 Bit 7 is set to "Yes".
		Others	Not available	

MODE 418 | Factory setting bit : 0 1 1 1 1 0 0 0 (Hex : 78)

Bit	Feature	Logic	Meaning	Description
7		0	Fixed to "0"	
65	Edge erase. (Copy)	00 01 10	0 mm 1 mm 2 mm	When a BS scan (including ADFR) is performed. In the APS/AMS mode, exactly the width set from the detected original size frame is erased. In the manual mode, exactly the set width from the frame of the read range determined by the paper size and the magnification is erased (white mask). <ul style="list-style-type: none"> • Does not function during an NADF read operation. • Functions in all modes.
4	I/C life stop specification.	0 1	Stop Do not stop	Sets whether to stop or not stop a print operation when the imaging unit reaches the end of its life.
3	I/C near-end-of-life display setting.	0 1	Do not display Display	Sets whether or not to display the fact that the imaging unit is approaching the end of its life.
210		000	Fixed to "000"	

MODE 421 | Factory setting bit : 0 1 0 0 0 0 0 0 (Hex : 40)

Bit	Feature	Logic	Meaning	Description
765	Destination code. (copy)	000 001 010 011 100 Others	MSJ MC ME Other Line adjustment Not available	Changes set values such as paper size and magnification.
43210		00000	Fixed to "00000"	

MODE 422 | Factory setting bit : 0 0 0 0 1 0 0 0 (Hex : 08)

Bit	Feature	Logic	Meaning	Description
76	Total counter. (Copy)	00 01 10 Others	Mode 1 (std) Mode 2 Mode 3 Not available	Setting of total counter counting method.
543	Size counter. (Copy)	000 001 010 011 100 Others	Do not count A3 A3/B4 A3/B4/FLS A6 Not available	Setting of paper size to be counted by size counter.
21	Copy Kit counter. (Copy) Sets whether or not the copy kit counter is to count, and also whether or not copying is to be inhibited.	00 01 10 11	Mode 1 Mode 2 (Count 1) Mode 3 (Count 2) Not available	Does not count. Copying takes place when the set value is reached. Copying is inhibit when the set value is reached.
0		0	Fixed to "0"	

MODE 423 | Factory setting bit : 0 1 0 0 1 0 0 0 (Hex : 48)

Bit	Feature	Logic	Meaning	Description
7	Plug-in counter. (Copy)	0 1	Copy Made Copy Cycles	Setting of threshold value of copy kit counter, and viewing count value.
6	Key counter. (Copy)	0 1	Yes No	Use of key counter or vender.
54	Vender mode.	00 01 10 11	Key counter Coin vender Card keeper Setting inhibit	Sets which of the key counter or vender to set when these are used.
3	Original size detecting option.	0 1	Yes No	Specifies whether or not original size detecting sensor is applicable to option.
210		000	Fixed to "000"	

MODE 424 | Factory setting bit : 0 0 0 1 1 0 0 0 (Hex : 18)

Bit	Feature	Logic	Meaning	Description
7	Auto paper configuration. (Copy)	0	Mixed	Specifies whether document sizes will be rounded off for the system specification in auto paper mode.
		1	Limited	
65	Select FLS size. (Copy)	00	210 330	Setting of sizes handled as FLS.
		01	203x330	
		10	216x330	
		11	220x330	
4	Copy mode limit. (copy)	0	Yes	Sets whether or not to inhibit setting of “two-sided copy” in the priority copy mode.
		1	No	
3	“Small” originals. (Copy)	0	Copy disabled	Sets whether to enable copying or emit an alarm when an original that is smaller than the minimum detectable size is loaded.
		1	Copy enabled	
2	Function limit. (Copy)	0	No	Sets whether or not to disable the settings of some of the copy mode functions (application, original copy).
		1	Yes	
1	Non-standard size original processing when ADFR and A4/Letter paper are selected. (copy)	0	Process	Setting when truncated A4T original (short dimension about 210 mm, long dimension about 250 mm) is copied using ADFR.
		1	Do not process	
0		0	Fixed to “0”	

MODE 425 | Factory setting bit : 0 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
7654		0000	Fixed to “0000”	
3210	Image quality mode adjustment. (copy)	0000		Setting of image density for printing. Enables setting of special image quality mode for Original Image Type of MODE 409 Bit4-1.
		1000		
		Others	Not available	

MODE 427 | Factory setting bit : 0 0 0 0 0 0 0 (Hex : 00)

Bit	Feature	Logic	Meaning	Description
76543	Default setting country classification. (copy)		Arbitrary setting	Setting differs depending upon the country.
210		000	Fixed to "000"	

MODE 430 | Factory setting bit : 0 1 1 1 1 0 0 (Hex : 78)

Bit	Feature	Logic	Meaning	Description
7654	LCD back-light off. (copy)	0000000	Not available	Setting of overseas scanner
321		0000001	1 min	SMTP timeout time
		0111100	60 min	1-second steps.
		11110000	120 min	
		Others	Not available	
0		0	Fixed to "0"	

TROUBLESHOOTING



1. TROUBLESHOOTING

1-1. Diagnosis by Alarm Code

- This section shows diagnoses of system troubles by alarm codes and their remedies.
- The default setting for diagnostic codes is “not to be displayed.” If you experience errors frequently, setup the soft switch (MODE 020) to display diagnostic codes. Then follow communication error codes tables for troubleshooting.
- Communication error codes tables shows communication error codes. Each of them has 6-digits on the panel and a report.
Codes 00 to B4 indicate the upper 2 digits. Adding internal 4 digits to them to display 6 digits on the panel and a report.
Communication reports (TX and RX) print out diagnostic codes for up to 50 activities. Any codes older than those activities cannot be printed.

NOTE

- Before you proceed with a remedy according to the tables, make sure that the power source cable and the connectors are connected properly.
-

* Setting up diagnostic code display

MODE 020	
Bit 3	Meaning
0	Do not display codes.
1	Displays codes.

See Section “Maintenance mode: Soft Switch Set” for setting up soft switches.

1-2. Communication Error Codes

(1) Errors in operations

Cause - Re: Remote, Li: Line, Lo: Local

Code	Description	Cause				Remedy
			Re	Li	Lo	
00	<ul style="list-style-type: none"> Received DIS but no document in local terminal Polling Reception is requested Software failure at time of connection 	Error in operation			<input type="radio"/>	Reload a document and retry TX.
		Error in operation at remote end	<input type="radio"/>			Ask to reload a document and retry TX.
01	<ul style="list-style-type: none"> Document pulled out while transmitting. Document size was too small 	Error in operation			<input type="radio"/>	Reload a correct document and retry TX.
02	<ul style="list-style-type: none"> Illegal dialing operation (Example; dialing * or # with DP setting) 	Error in setting up			<input type="radio"/>	Check the soft switch (MODE 006 Bit5 & MODE 011 Bit 5).
		Error in registration			<input type="radio"/>	Check the registered one-touch dialing number.
03	<ul style="list-style-type: none"> Mismatched TX password 	Sender's password and receiver's are not matched.	<input type="radio"/>		<input type="radio"/>	Check the group password of both sides.
04	<ul style="list-style-type: none"> Mismatched RX password 	Sender's password and receiver's are not matched.	<input type="radio"/>		<input type="radio"/>	Check the group password of both sides.
05	<ul style="list-style-type: none"> Mismatched password while polling 	Incorrect password was entered for setting up polling.			<input type="radio"/>	Check the status of the remote machine and the local password.
06	<ul style="list-style-type: none"> Remote system has no relay function 	Failure in remote machine	<input type="radio"/>			Check the status of the remote machine.
07	<ul style="list-style-type: none"> Remote system has not confidential communication function 	Failure in remote machine	<input type="radio"/>			Check the status of the remote machine.

Cause - Re: Remote, Li: Line, Lo: Local

Code	Description	Cause				Remedy
			Re	Li	Lo	
09	<ul style="list-style-type: none"> Incompatibility (Example; no document in local system while polling RX) TX failure due to mismatch of communication type and/or transmission speed 	Error in operation on remote side	<input checked="" type="radio"/>			Ask the remote end to reload the document again.
		Transmission speeds are set 4800/2400 bps. Remote machine has only V.29.	<input checked="" type="radio"/>		<input checked="" type="radio"/>	Check the soft switch (MODE 049 Bit 4 -0). Check the maximum transmission speed for each one-touch dialing (only for registration in maintenance features).
10	<ul style="list-style-type: none">Error in F code TX	Failure in remote machine	<input checked="" type="radio"/>			Check the status of the remote machine.
11	<ul style="list-style-type: none">Error in F code RX	Failure in remote machine	<input checked="" type="radio"/>			Check the status of the remote machine.

(2) Terminal alarm

Cause - Re: Remote, Li: Line, Lo: Local

Code	Description	Cause				Remedy
			Re	Li	Lo	
45	<ul style="list-style-type: none"> Memory overflow or nearly full 	Memory overflows or nearly full			<input checked="" type="radio"/>	Reset the terminal alarm and ask the remote end for resending.
		Feeding is not working continuously.			<input checked="" type="radio"/>	Reload a document.
46	<ul style="list-style-type: none"> Document jamming 	Jamming in a long document or in the middle of a page (Feeding is not completed even if feeding exceeds 1 m.)			<input checked="" type="radio"/>	Reload a document.
		Out of print paper			<input checked="" type="radio"/>	Load print paper.
47	<ul style="list-style-type: none"> "No print paper" or "Side cover opened" were detected 	Side cover was opened while RX			<input checked="" type="radio"/>	Close the side cover.

(3) Communication errors (TX)

Cause - Re: Remote, Li: Line, Lo: Local

Code	Description	Cause				Remedy
			Re	Li	Lo	
33	<ul style="list-style-type: none"> Protocol failure in V.34 sequence 	Failure in remote machine	<input type="radio"/>			Try another remote machine.
		Line failure		<input type="radio"/>		Try another line.
70	<ul style="list-style-type: none"> Busy tone while waiting for initial identification signal Timeout or modem failure while detecting 2nd dialing tone Cannot dial due to dialing/ringing conflict T1 timeout while waiting for initial identification signal when FAX signal is not detected 	Failure in remote machine	<input type="radio"/>			Try another remote machine.
		Line failure			<input type="radio"/>	Try another line.
71	<ul style="list-style-type: none"> T1 timeout while waiting for initial identification signal after FAX signal is detected Detected reverse polarity while waiting for initial identification signal 	Failure in remote machine	<input type="radio"/>			Try another remote machine.
		Line failure		<input type="radio"/>		Try BACK to BACK communication.
72	<ul style="list-style-type: none"> Received DCN in phase B while waiting for commands other than DCN 	Interruption or failure in remote machine	<input type="radio"/>			Check the remote system and retry TX.
74	<ul style="list-style-type: none"> Received DIS or DTC 3 times while waiting for response to TCF No response even after sending TSI/DCS and TCF 3 times Received FTT twice even TCF has lowest speed 	Failure in remote machine	<input type="radio"/>			Try another remote machine.
		Line failure		<input type="radio"/>		Try another line.
		Failure in FAX1 board			<input type="radio"/>	Replace FAX1 board
		Failure in MFB2 board			<input type="radio"/>	Replace MFB2 board
76	<ul style="list-style-type: none"> Reverse polarity while waiting for signal other than initial identification 	Failure in remote machine	<input type="radio"/>			Check the remote system and retry TX.
		Line failure		<input type="radio"/>		If same error will be experienced several times, set the soft switch (MODE 082 Bit 3) 0.

Code	Description	Cause				Remedy
			Re	Li	Lo	
77	<ul style="list-style-type: none"> No response to post message (T4 timeout) 5 minute timeout in RNR, RR sequence (T5 timeout) 	Failure in remote machine	<input type="radio"/>			Try another remote machine.
		No RTC detection in remote machine (line failure)		<input type="radio"/>		Try another line.
78	<ul style="list-style-type: none"> Received DCN while waiting for response to post message 	Interruption or failure in remote machine	<input type="radio"/>			Check the status of the remote machine and retry TX.
79	<ul style="list-style-type: none"> Received PIP for post message (For response to EOP or PPS-EOP, communication is normal even error code is displayed) 	Failure in remote machine	<input type="radio"/>			Check the status of the remote machine.
7A	<ul style="list-style-type: none"> Received RTN for post message (where RTN reception is regarded as communication failure) Retry out of resending error PPR frame error 	Failure in remote machine	<input type="radio"/>			Check the status of the remote machine.
		Line failure		<input type="radio"/>		Check the line.
		Failure in TX level			<input type="radio"/>	Check TX level.
7C	<ul style="list-style-type: none"> Received CRP 3 times for TCF Received CRP 3 times for post message Received CRP 3 times for DTC of polling reception 	Failure in remote machine	<input type="radio"/>			Try another remote machine.
		Line failure		<input type="radio"/>		Try another line.
7D	<ul style="list-style-type: none"> RX command error (without cutting off carrier) 	Failure in remote machine	<input type="radio"/>			Check the status of the remote machine.
7F	<ul style="list-style-type: none"> No remote machine response after changing mode (T1 timeout) 	Failure in remote machine	<input type="radio"/>			Check the status of the remote machine.
8F	<ul style="list-style-type: none"> Received PIN for post message 	Failure in remote machine	<input type="radio"/>			Check the status of the remote machine.

(4) Communication errors (RX)

Cause - Re: Remote, Li: Line, Lo: Local

Code	Description	Cause				Remedy
			Re	Li	Lo	
33	• Protocol failure in V.34 sequence	Failure in remote machine	<input type="radio"/>			Try another remote machine.
		Line failure		<input type="radio"/>		Try another line.
91	• T1 timeout while waiting for initial identification signal	Failure in remote machine	<input type="radio"/>			Try another remote machine.
		Line failure		<input type="radio"/>		Try another line.
92	• Received DCN while waiting for commands other than DCN in phase B	Interruption or failure in remote machine	<input type="radio"/>			Check the status of the remote machine and retry TX.
95	• Detected low speed flag followed by 10 sec. timeout while waiting for detection of image signal carrier (HMCD ON)	Failure in remote machine	<input type="radio"/>			Try another remote system.
		Line failure		<input type="radio"/>		Try another line.
96	• Carrier disconnected for 15 seconds while receiving G3 image signal	Error in remote machine	<input type="radio"/>			Ask for resending.
		Failure in remote machine	<input type="radio"/>			Try another remote machine.
		Line failure		<input type="radio"/>		Try another line.
97	<ul style="list-style-type: none"> • T2 timeout while waiting for post message • T2 timeout while waiting for DCN after receiving last page • No response from remote system after changing mode (T2 timeout) 	Error in remote machine	<input type="radio"/>			Try another remote machine.
		Accidental RTC detection (line failure)		<input type="radio"/>		Try another line.
98	• Received DCN while waiting for command other than DCN in phase D	Interruption or failure in remote machine	<input type="radio"/>			Ask for resending.

Code	Description	Cause				Remedy
			Re	Li	Lo	
99	• Received PRI-Q as post message (Communication is regarded as normal even with error message)	Failure in remote machine	<input type="radio"/>			Check the status of the remote machine.
9A	• Cannot decode line correctly for 35 seconds while receiving ECM image signal	Failure in remote machine	<input type="radio"/>			Try another remote machine.
		Line failure		<input type="radio"/>		Try another line.
		Failure in FAX1 board			<input type="radio"/>	Replace FAX1 board
		Failure in MFB2 board			<input type="radio"/>	Replace MFB2 board
9C	• Received CRP 3 times while waiting for initial identification signal	Failure in remote machine	<input type="radio"/>			Try another remote machine.
		Failure in FAX1 board			<input type="radio"/>	Replace FAX1 board
		Failure in MFB2 board			<input type="radio"/>	Replace MFB2 board
		Line failure		<input type="radio"/>		Try another line.
9D	• RX command error (without cutting off carrier)	Failure in remote machine	<input type="radio"/>			Check the status of the remote machine.
9F	• Interrupted page reception by EOR-Q or EOR-PRI-Q signal from sender in ECM procedure (next page may be received completely because ECM procedure runs continuously)	Failure in remote machine	<input type="radio"/>			Try another remote machine.
		Line failure			<input type="radio"/>	Reduce the initial transmission speed and try resending.

(5) Malfunction

Cause - Re: Remote, Li: Line, Lo: Local

Code	Description	Cause				Remedy
			Re	Li	Lo	
B0	• Power source off	Power source switch was turned off			<input type="radio"/>	None.
		Power source failure			<input type="radio"/>	None.
		Defective power source supply unit			<input type="radio"/>	Replace the power source supply unit.
B2	• System failure (Examples; image data conversion failure and error in sequence timing)	Warm restart switch was pressed			<input type="radio"/>	None.
		Failure in FAX1 board			<input type="radio"/>	Replace FAX1 board
		Failure in MFB2 board			<input type="radio"/>	Replace MFB2 board
		Line failure		<input type="radio"/>		Check line noise and reception level.
B4	• Modem failure	Document was not loaded for polling reception in V.34 mode	<input type="radio"/>			Check the document loaded in the remote side.
		Line failure		<input type="radio"/>		Check line noise and reception level.
		Failure in FAX1 board			<input type="radio"/>	Replace FAX1 board
		Failure in MFB2 board			<input type="radio"/>	Replace MFB2 board
		Line failure		<input type="radio"/>		Check line noise and reception level.
B5	• Modem failure (modem failure in V.8 sequence at RX)	Failure in FAX1 board			<input type="radio"/>	Replace FAX1 board
		Failure in MFB2 board			<input type="radio"/>	Replace MFB2 board
		Line failure		<input type="radio"/>		Check line noise and reception level.
B6	• Modem failure (modem failure in V.8 sequence at RX)	Failure in MFB2 board			<input type="radio"/>	Replace MFB2 board
		Failure in FAX1 board			<input type="radio"/>	Replace FAX1 board
		Line failure		<input type="radio"/>		Check line noise and reception level.
B7	• System failure (Examples; image data conversion failure, error in sequence timing)	Warm restart switch was pressed			<input type="radio"/>	None.
		Failure in FAX1 board			<input type="radio"/>	Replace FAX1 board
		Failure in MFB2 board			<input type="radio"/>	Replace MFB2 board
		Line failure		<input type="radio"/>		Check line noise and reception level.

1-3. Diagnosis by Symptoms

- Possible causes of various problems and their remedies are shown below. Carry out troubleshooting according to this table.

Note

- Print out the service call report and activity reports (TX/RX) to understand the system settings and status before replacing boards or the system entirely, or correct a failure.

Symptom	Item No.	Cause	Remedy	
No TX marker stamps on document	1	Is TX marker ON? (Do you have TX marker option?)	YES	Go to item 2.
			NO	Turn ON TX marker. (Install TX marker option.)
	2	Does TX marker have ink in it?	YES	Go to item 3.
			NO	Replace TX marker.
	3	Any improvement after replacing TX marker?	YES	Replace TX marker.
			NO	Go to item 4.
	4	Are there any disconnections or hurts on TX marker cable?	YES	Replace TX marker.
			NO	Go to item 5.
	5	Is the voltage of +24V supplied to CN10-1 of ACR?	YES	Go to item 6.
			NO	Check the cable between ACR and PSU (including the fuse). If the cable is OK, replace PSU.
	6	Any improvement after replacing the cable between MFB2 and ACR?	YES	Replace the cable between MFB2 and ACR.
			NO	Go to item 7.
	7	Any improvement after replacing ACR board?	YES	Replace ACR board.
			NO	Go to item 8.
	8	Any improvement after replacing MFB2 board?	YES	Replace MFB2 board.
			NO	Replace the PWB-A

Symptom	Item No.	Cause	Remedy	
Received image is stretched with ADF	1	Printed image is excessively stretched in the copy mode? Note: <i>The following causes may be possible (improper document handling): special paper such as very thick paper, non-carbon print paper, carbon print paper.</i>	YES	Go to item 2.
			NO	Failure in remote terminal (improper document handling, error in the transmission unit of the remote terminal).
	2	Is an image from the service center also stretched?	YES	Go to item 3.
			NO	Go to item 5.
	3	Any improvement after replacing MFB2 board?	YES	Replace MFB2 board.
Received image is shrunk too much.			NO	Replace the PWB-A
	4	Is the contact of feed roller gears OK?	YES	Go to item 5.
			NO	Replace the feed roller gear unit.
	5	Any paper dust on main rollers or feed rollers?	YES	Clean up rollers.
			NO	Replace the leaf spring.
	1	Printed image is excessively shrunk in the copy mode?	YES	Go to item 2.
				Failure in the remote terminal (improper document handling, error in the transmission unit of the remote terminal).
	2	Is an image from the service center also shrunk?	YES	Go to item 4.
			NO	Go to item 3.
	3	Any improvement after checking the reading unit?	YES	END
			NO	Go to item 4.
	4	Any improvement after replacing MFB2 board?	YES	Replace MFB2 board.
			NO	Replace the PWB-A

Symptom	Item No.	Cause	Remedy	
Received image is too light or faded.	1	Are copied image or a test image also too light or faded? Note: <i>The following causes may be possible (improper setting of document contrast): a document with small blue characters or file lines</i>	YES	Go to item 2. Failure in the remote side (improper setting of document contrast, improper document handling, poor line condition, and error in the transmission unit of the remote terminal).
	2	Any improvement after replacing the imaging unit?	NO	Replace the imaging unit. For details see Copier service manual "Image quality problem."
Received image is squeezed	1	Are characters of copied image or a test image also squeezed? Improper setting of document contrast: Received image of small characters or blue copies with "contrast" switch set "Darker". Error in remote machine: The following causes are possible: A. Failure in board of scanner unit B. Improper adjustment of optical focus C. Dew on optical lenses (Proceed to anti-dew.)	YES	Failure in the remote side (improper setting of document contrast, and error in the transmission unit of the remote terminal). Go to item 2.
	2	Any improvement after replacing the imaging unit?	NO	Replace the imaging unit. For details see Copier service manual "Image quality problem."

Symptom	Item No.	Cause	Remedy	
Clock malfunctions	1	No improper operation?	YES	Refer Operator's manual for operation.
			NO	Go to item 2.
	2	Any improvement after replacing FAX1 board?	YES	Replace FAX1 board.
			NO	Go to item 3.
	3	Any improvement after replacing MFB2 board?	YES	Replace MFB2 board.
			NO	Replace the PWB-A.
Neither "Sending" nor "Receiving" are displayed.	1	Is an alarm message on screen?	YES	Correct the failure and reset the alarm.
			NO	Go to item 2.
	2	Is the external telephone on-hooked?	YES	Go to item 3.
			NO	Set the external telephone off-hook then press the communication switch.
	3	Are you printing something such as report?	YES	Proceed to communication after completing print jobs.
			NO	Go to item 4.
	4	Any improvement after replacing AOP board?	YES	Replace AOP board.
			NO	Go to item 5.
	5	Any improvement after replacing the cable between AOP and MFB2?	YES	Replace the cable between AOP and MFB2.
			NO	Go to item 6.
	6	Any improvement after replacing FAX1 board?	YES	Replace FAX1 board.
			NO	Go to item 7.
	7	Any improvement after replacing MFB2 board?	YES	Replace MFB2 board.
			NO	Replace the PWB-A.

Symptom	Item No.	Cause	Remedy	
Cannot go to "Sending" nor "Receiving" modes	1	Is the password checked?	YES	Go to item 2.
			NO	Go to item 3.
	2	Is the password correct?	YES	Disable password check and Go to item 3.
			NO	Match the password.
	3	Try to communicate with the service center. Same problem? Possible causes: A. FAX button is not pressed. B. Both systems are in the transmission (or reception) mode.	YES	Go to item 4.
			NO	END Possible causes are line trouble, trouble or improper operation in the remote terminal, or the remote FAX is not connected.
	4	Are the transmission level and equalizer of the service center set properly?	YES	Go to item 5.
			NO	Set them properly.
	5	Did you check the mode (TX or RX) of the remote side?	YES	Go to item 6.
			NO	Confirm it by phone.
	6	Any improvement after replacing NCU board?	YES	Replace NUC board.
			NO	Go to item 7.
	7	Any improvement after replacing the cable between NUC and FAX1?	YES	Replace the cable between NUC and FAX1.
			NO	Go to item 8.
	8	Any improvement after replacing FAX1 board?	YES	Replace FAX1 board.
			NO	Go to item 9.
	9	Any improvement after replacing MFB2 board?	YES	Replace MFB2 board.
			NO	Go to item 10.
	10	Any improvement after replacing AOP board?	YES	Replace AOP board.
			NO	Go to item 11.
	11	Any improvement after replacing the cable between AOP and MFB2?	YES	Replace the cable between AOP and MFB2.
			NO	Replace the PWB-A

Symptom	Item No.	Cause	Remedy	
Automatic reception disabled	1	Did you select the automatic reception mode?	YES	Go to item 2
			NO	Select the automatic reception mode.
	2	Is the external telephone on hook?	YES	Go to item 3.
			NO	Set the external telephone on-hook.
	3	Any improvement after replacing NCU board?	YES	Replace NUC board.
			NO	Go to item 4.
	4	Any improvement after replacing the cable between NUC and FAX1?	YES	Replace the cable between NUC and FAX1.
			NO	Go to item 5.
	5	Any improvement after replacing FAX1 board?	YES	Replace FAX1 board.
			NO	Go to item 6.
	6	Any improvement after replacing MFB2 board?	YES	Replace MFB2 board.
			NO	Go to item 7.
	7	Any improvement after replacing AOP board?	YES	Replace AOP board.
			NO	Go to item 8.
	8	Any improvement after replacing the cable between AOP and MFB2?	YES	Replace the cable between AOP and MFB2.
			NO	Replace the PWB-A

Symptom	Item No.	Cause	Remedy	
Cannot send dial number from 10 key pad	1	Is the external telephone off-hook?	YES	Go to item 2.
			NO	Set the handset on-hook.
	2	Is the line type specified correctly?	YES	Go to item 3.
			NO	Specify the line type (PB, 10, 20 PPS) correctly.
	3	Dial by 10 key?	YES	Go to item 5.
			NO	Go to item 4.
	4	Did you register the phone number?	YES	Go to item 5.
			NO	Register the phone number.
	5	Any improvement after replacing NCU board?	YES	Replace NUC board.
			NO	Go to item 6.
	6	Any improvement after replacing the cable between NUC and FAX1?	YES	Replace the cable between NUC and FAX1.
			NO	Go to item 7.
	7	Any improvement after replacing FAX1 board?	YES	Replace FAX1 board.
			NO	Go to item 8.
	8	Any improvement after replacing MFB2 board?	YES	Replace MFB2 board.
			NO	Go to item 9.
	9	Any improvement after replacing AOP board?	YES	Replace AOP board.
			NO	Go to item 10.
	10	Any improvement after replacing the cable between AOP and MFB2?	YES	Replace the cable between AOP and MFB2.
			NO	Replace the PWB-A

Symptom	Item No.	Cause	Remedy	
Cannot monitor communication	1	Is the sound volume switch OFF?	YES	Select a sound volume switch other than OFF.
			NO	Go to item 2
	2	Is S/W DIP SW set line monitoring?	YES	Go to item 3.
			NO	Set S/W DIP SW.
	3	Any improvement after replacing the speaker?	YES	Replace the speaker.
			NO	Go to item 4.
	4	Any improvement after replacing FAX1 board?	YES	Replace FAX1 board.
			NO	Go to item 5.
	5	Any improvement after replacing MFB2 board?	YES	Replace MFB2 board.
			NO	Go to item 6.
	6	Any improvement after replacing AOP board?	YES	Replace AOP board.
			NO	Go to item 7.
	7	Any improvement after replacing the cable between AOP and MFB2?	YES	Replace the cable between AOP and MFB2.
			NO	Replace the PWB-A

Symptom	Item No.	Cause	Remedy	
Image memory (memory stored for TX image) is not backed up.	1	Proceed to the following procedure. Is the image memory backed up? A. TX: Disconnect the line cable and proceed a quick memory transmission. Turn OFF the power switch while waiting for the answer. Turn ON the power and check if data is stored in the image memory. B. RX: Turn OFF the power switch while proceeding memory reception without printing paper. Turn ON the power again and check if data is stored in the image memory.	YES	Normal
			NO	Go to item 2
	2	Is the connector of FAX1 board connected?	YES	Go to item 3.
			NO	Connect the connector.
	3	Is the voltage of +12 V between CN 7-1 (FAX1) and AG (TP5) normal? (+11.4 to +12.6 V)	YES	Go to item 4.
			NO	Go to item 5.
	4	Is the battery voltage appropriate? (6.85 V or more)	YES	Go to item 8.
			NO	Go to item 6.
	5	Any improvement after replacing PSU board?	YES	Replace PSU board.
			NO	Go to item 4.
	6	Is the battery full charged? (Approx. 4hr)	YES	Go to item 7.
			NO	Charge the battery.
	7	Any improvement after replacing the battery?	YES	Replace the battery.
			NO	Go to item 8.
	8	Any improvement after replacing FAX1 board?	YES	Replace FAX1 board.
			NO	Go to item 9.
	9	Any improvement after replacing MFB2 board?	YES	Replace MFB2 board.
			NO	Replace the PWB-A

2. WARM RESTART

2-1. Overview

- Use the warm restart function when you run the maintenance mode or you cannot use the switches on the control panel due to some error (in the transmission, the reception, or the copy modes).

If you push the warm restart button, the status of the machine will be initialized. However, the document and the data stored in the internal memory are maintained. After initializing the machine, start processing the stored document (except a copied document and PC print document).

2-2. How to Operate Warm Restart

- Press the switch inside the small hole that is located on the side of the control panel.

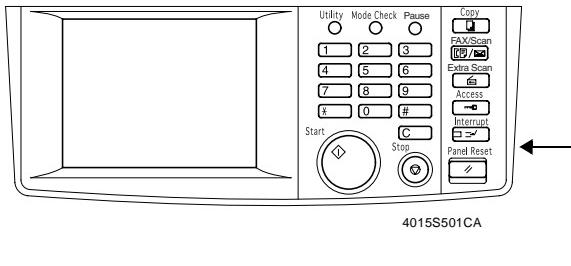
2-3. Warm Restart Steps

- Activate warm restart by pushing the switch described in 2-2.

At this moment, all displays on the panel will disappeared.

After about 5 seconds later, warm restart is completed and the initial screen of the panel will be displayed. After this initialization, start processing the stored document.

Control Pane



Use a pin to push the button inside
small hole that is located on the side.

3. CLEARING RAM UNCONDITIONALLY

3-1. Overview

- Use this function when warm restart does not work.

3-2. Operation of Unconditional RAM Clear

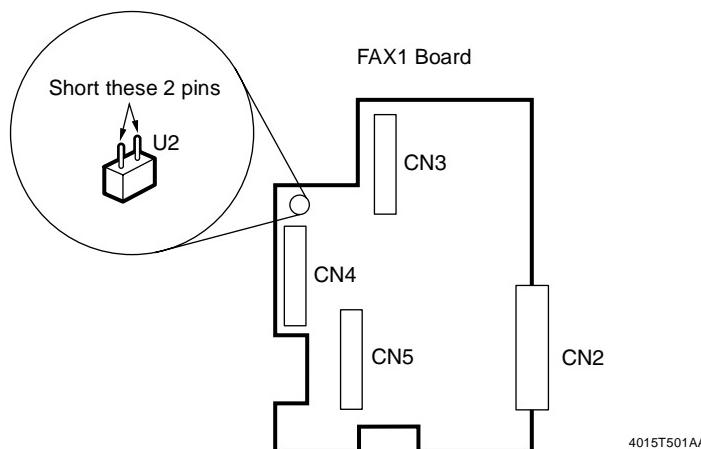
1. Turn OFF the power switch.
2. Remove the upper cover, back cover and the shield so that you can access FAX1 board.
3. Short the 2 pins of U2 on the FAX1 board with a metal object like a clip. Turn ON the power switch with the 2 pins shorted. (Be careful not short other parts.)
With this procedure, the system clears RAM and brings up the initial screen.
4. Make sure that RAM has been cleared. Then turn OFF the power switch.
5. Remove the clip and reattach the shield and the upper cover.
6. Input the data that was cleared by BBRAM all clear.

3-3. Steps of Unconditional RAM Clear

With the procedure in 3-2, all data stored in BBRAM will be cleared.

Data to be cleared

- Serial number
- Image information
- Time
- Soft switch information
- Service call information
- Mechanism adjustment information
- Accumulated number of pages
- Bulletin board information
- Model type
- Management information per business section
- Self information
- PC printer function setup
- Remote side data
- Copy function data
- Communication activity information



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